CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO 1 TO ORDER NO. 98-60
NPDES NO. CA0107492
AN ADDENDUM MODIFYING THE MONITORING AND REPORTING PROGRAM
FOR
PADRE DAM MUNICIPAL WATER DISTRICT
PADRE DAM WATER RECYCLING FACILITY
DISCHARGE TO SYCAMORE CREEK AND THE SAN DIEGO RIVER
SAN DIEGO COUNTY

The California Regional Water Quality Board, San Diego Region (hereinafter Regional Board), finds that:

1. On May 9, 1998, the Regional Board adopted Order No. 98-60, *National Pollutant Discharge Elimination System Permit No. CA0107492, Waste Discharge Requirements for Padre Dam Municipal Water District, Padre Dam Water Recycling Facility Discharge to Sycamore Creek and The San Diego River, San Diego County*. Order No. 98-60 establishes requirements for the discharge of up to 2.0 million gallons per day (MGD) of treated sewage from the Padre Dam Water Recycling Facility (PDWRF) through the Santee Lakes to Sycamore Creek and the San Diego River.

2. On April 1, 1998, Padre Dam Municipal Water District (PDMWD) submitted a report of waste discharge requesting the Monitoring and Reporting Program of Order No. 98-60 be modified to change testing methods for measurement of biological activity and sampling benthic invertebrates, locations of sampling stations, and frequency of sampling for priority pollutants and biological oxygen demand.

3. The Monitoring and Reporting Program as modified by this Addendum is reasonable for determining compliance with the terms and conditions of Order No. 98-60 and all applicable State and federal water quality standards.

4. The issuance of this Addendum is exempt from the requirements for preparation of environmental document under the California Environmental Quality Act in accordance with Section 13389 of the Clean Water Code.

5. The Regional Board has considered all environmental factors associated with the existing discharge.

6. The Regional Board has notified PDMWD and all known interested parties of its intent to modify waste discharge requirements for the existing discharge.

7. The Regional Board in a public hearing, heard and considered all comments pertaining to the existing discharge.

IT IS HEREBY ORDERED that, Order No. 98-60 is modified as follows:

The Monitoring and Reporting Program No. 98-60 is superseded by the following:

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Regional Board.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy aid reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 5 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

   a. "Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)

   b. "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127, 19/2:W29/2, Stock No. S/N 24003-0027.)

   c. "Flow, Measurement in Open Channels and Closed Conduits," U.S.Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy of microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB273-535/5ST.)

   d. "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement Publication MCD-51, 1977, 140 pp. (Available from the General Service

Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225).

3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified this Order.

4. Published values for MDLs (defined below) and PQLs (defined below) should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Regional Board will determine appropriate values based on available information, including information submitted by the discharger upon request by the Regional Board.

   a) The Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B.

   b) The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within $\pm$20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.

5. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Service or a laboratory approved by the Regional Board.

6. Monitoring results must be reported on discharge monitoring report forms approved by the Regional Board.

7. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 (CFR), Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

8. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge of when requested by the Regional Board Regional Board or the United States Environmental Protection Agency.

9. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individuals who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The laboratory and individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of all such analyses.

10. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Board or in this Order.

11. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Regional Board a written statement signed by a registered professional engineer certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required by Monitoring Provision A.2.

12. All analytical data shall be reported uncensored with method detection limits (MDLs) and either practical quantitation levels (PQLs) or limits of quantitation (LOQs) identified. Acceptance of data should be based on demonstrated laboratory performance.

13. The discharger shall report all instances of noncompliance not reported under Reporting Requirement No. E.6 of Order No. 98-60 at the time monitoring reports arc submitted. The reports shall contain the information listed in Reporting Requirement No. E.6.

14. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement No. E. 15.

15. A composite sample is defined as a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory -immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the precious aliquot. Aliquots may be collected manually or automatically.

16. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

17. Reports of monitoring surveys conducted to meet receiving water monitoring requirements of this monitoring and reporting program shall include, as a minimum, the following information:

a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, time of sampling, etc.)

b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediments, rocks, etc.)

c. A description of the sample collection and preservation procedures used in the survey.

d. A description of the specific method used for laboratory analysis.

e. An in-depth discussion of the results of the survey. The discussion shall compare data from the reference station(s) with data from the stations located in the area of the discharge. All tabulations and computations shall be explained.

18. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN/100 ml. The detection method used for each analysis shall be reported with the results of the analysis.

19. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method approved by the Regional Board.

20. The purpose of this monitoring program is to:
    a. Determine compliance with the terms and conditions of Order No. 98-60.
    b. Determine that the applicable State and federal water quality standards are met.

21. Revisions to this MRP may be made by the Regional Board at any time during the term Order No. 98-60, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

22. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by January 30 of each year which summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. The discharger should have a success rate equal to or greater than 80 percent.

B. INFLUENT MONITORING

Influent monitoring is required to determine the effectiveness of a pretreatment program and assess treatment plant performance. The sampling station shall be located upstream of any in-plant return

flows and where a representative sample of the influent to the treatment plant can be obtained. The date and time of sampling shall be reported with the analytical values determined.

The following table shall constitute the influent monitoring program.

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous
specific conductance	umhos/cm	Grab	2 times/day
pH	pH Units	Grab	2 times/day
BOD(5-d,20-C)	mg/L	24 Hr. Composite	3 times/week
COD	mg/L	24 Hr. Composite	3 times/week
total suspended solids	mg/L	24 Hr. Composite	3 times/week
ammonia nitrogen	mg/L	Grab	Monthly
total nitrogen	mg/L	24 Hr. Composite	Monthly
total phosphorous	mg/L	24 Hr. Composite	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Quarterly
total hardness	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly
cyanide	ug/L	24 Hr. Composite	Quarterly
Metals*	ug/L	24 Hr. Composite	Quarterly
PAHs	ug/L	24 Hr. Composite	Annual
Pesticides*	ug/L	24 Hr. Composite	Annual
Base/Neutral Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Acid Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Volatile Organics*	ug/L	Grab	Annual

* See attachment A

C. EFFLUENT MONITORING

Effluent monitoring is required to determine compliance with the permit conditions and to identify operational problems and improve plant's performance. Effluent monitoring also provides information on wastewater characteristics and flows for use in interpreting water quality and biological data.

Sample stations are Station A - the point leaving the chlorine contact basin (after dechlorination) and Station B - the discharge point where water from Lake 1 overflows to Sycamore Creek. The date and time of sampling shall be reported with the analytical values determined.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the discharger shall monitor and record data for all of the parameters listed in the effluent monitoring schedule, after which the frequencies of analyses listed in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

In conformance with federal regulations (40 CFR 122.45(c)), analyses to determine compliance with the effluent concentration limitations for heavy metals shall be conducted using the total recoverable method. For these constituents, if the discharger satisfactorily demonstrates to the Regional Board an acid soluble/total recoverable method relationship, determination of compliance will be based on a comparison of the adjusted total recoverable method results to permit limits.

The following tables shall constitute the effluent monitoring program.

A. Samples of the discharge at Station A shall be analyzed for the following constituents:

Parameter	Units	Type of Sample	Sample/Analysis Frequency
specific conductance	umhos/cm	Recorder	Continuous
pH	pH Units	Recorder	Continuous
chlorine residual	ug/L	Recorder	Continuous
turbidity	NTU	Recorder	Continuous
BOD(5-d,20 deg. C)	mg/L	24-Hr. Composite	3 times/week
COD	mg/L	24-Hr. Composite	3 times/week
total suspended solids	mg/L	24-Hr. Composite	3 times/week
total/fecal Coliform	MPN/100ml	Grab	Daily
oil and grease	mg/L	24 Hr. Composite	Monthly
color	units	24 Hr. Composite	Monthly
MBAS	mg/L	24 Hr. Composite	Monthly
percent sodium	%	24 Hr. Composite	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Monthly
total hardness	mg/L	24 Hr. Composite	Quarterly
total organic carbon	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly

Toxicity	See Section E below		Quarterly
cyanide	ug/L	24 Hr. Composite	Annual
PAHs	ug/L	24 Hr. Composite	Annual
Metals*	ug/l	24 Hr. Composite	Annual
Pesticides*	ug/L	24 Hr. Composite	Annual
Base/Neutral Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Acid Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Volatile Organics*	ug/L	Grab	Annual
Fish in Lake 7 **	part per billion	Grab	Annual

*See attachment A

** Tissue of fish in Lake 7 shall be collected and analyzed according to the latest criteria of Toxic Substances Monitoring Program.

B. Samples of the discharge at Station B shall be analyzed for the following constituents:

Parameter	Units	Type of Sample	Sample/Analysis Frequency
ammonia nitrogen	mg/L	Grab	Monthly
total nitrogen	mg/L	24-Hr. Composite	Monthly
total phosphorous	mg/L	24 Hr. Composite	Monthly

C. Flow measurement

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous

D. RECEIVING WATER MONITORING

1. The following table constitutes the receiving water monitoring program. The monitoring outlined in the table is to be conducted at the following 6 monitoring stations, except for those constituents with a sample/analyses frequency of quarterly and annually, which shall be conducted only at Sample Stations a and e.

   a. San Diego River @ Carlton Hills Boulevard in Santee-Upstream Station.
   b. Forrester Creek @ 50 feet upstream of the confluence with the San Diego River-Upstream -Station.

c. San Diego River @ Mast Boulevard.
d. San Diego River @ the pond just downstream of Old Mission Dam.
e. San Diego River @ San Diego Mission ponds just south of Friars Road bridge.
f. San Diego River @ Fashion Valley Road.

The following table shall constitute the receiving water monitoring program

Parameter	Units	Type of Sample	Sample/Analysis Frequency	Sample Stations
flowrate	mgd		Biweekly*	a,b,c,d,e,f
specific conductance	umhos/cm	Grab	Biweekly*	a,b,c,d,e,f
pH	pH Units	Grab	Biweekly*	a,b,c,d,e,f
chlorine residual	ug/L	Grab	Biweekly*	a,b,c,d,e,f
turbidity	NTU	Grab	Biweekly*	a,b,c,d,e,f
Total/Fecal Coliform	MPN	Grab	Biweekly*	a,b,c,d,e,f
ammonia nitrogen	mg/L	Grab	Biweekly*	a,b,c,d,e,f
nitrate	mg/L	Grab	Biweekly*	a,b,c,d,e,f
total nitrogen	mg/L	Grab	Biweekly*	a,b,c,d,e,f
ortho phosphate phosphorous	mg/L	Grab	Biweekly*	a,b,c,d,e,f
total phosphate phosphorous	mg/L	Grab	Biweekly*	a,b,c,d,e,f
general plankton[1]		Grab	Biweekly*	a,b,c,d,e,f
transparency		Grab	Biweekly*	a,b,c,d,e,f
total dissolved solids	mg/L	Grab	Biweekly*	a,b,c,d,e,f
dissolved oxygen[2]	mg/L	Grab	Biweekly*	a,b,c,d,e,f
temperature	deg.	Grab	Biweekly*	a,b,c,d,e,f
total hardness	mg/L	Grab	Quarterly	a,e
total organic carbon	mg/L	Grab	Quarterly	a,e
fluoride	mg/L	Grab	Quarterly	a,e
boron	mg/L	Grab	Quarterly	a,e
sulfate	mg/L	Grab	Quarterly	a,e
chloride	mg/L	Grab	Quarterly	a,e
Metals[3]	mg/l	Grab	Quarterly	a,e
Toxicity	See Section E below		Quarterly	a,e
PAHs	ng/L	Grab	Annual	a,e
cyanide	ug/L	Grab	Annual	a,e
Pesticides[3]	ug/L	Grab	Annual	a,e
Base/Neutral Extractibles Organics[3]	ug/L	Grab	Annual	a,e
Acid Extractibles Organics[3]	ug/L	Grab	Annual	a,e

Volatile Organics[3]	ug/L	Grab	Annual	a,e
fish[5]	Survey		Annual	a,e
benthic invertebrates[6]	Survey		Annual	a,e

Note: Annual monitoring shall be conducted in October.
*Biweekly between April 1 and October 1, Monthly between October 2 and March 31
[1] General Plankton shall be analyzed by Lackey-Ball Plankton Technique (see attachment B), or an alternative method approved by Regional Board.
[2] Near surface D.O.s shall be collected within 2 hours of sunrise
[3] See attachment A
[5] Fish surveys shall be conducted in accordance with guidance document entitled "Rapid Bioassessment Protocols" (May, 1989). Parameters to be assessed shall include: a) taxa, b) biotic index, ratio of scrapers to filtering species, c) ratio of EPT and chironomid, d) EPT index, e) taxa of fish, f) trophic levels, g) fish reproduction, h) fish recruitment, i) population size of each taxa, and j) ratio of intolerant to tolerant species
[6] See Attachment C.

E. BIOMONITORING

1. Static Acute Toxicity Monitoring

Static acute toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90-027, September, 1991 or subsequent editions), using the Fathead Minno (Pimephales promelas) at 20° C - 23° C for 96 hours. The test results shall be reported as percent survival of the test organisms or 96-hour LC-50.

2. Chronic Toxicity Monitoring

Chronic toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Second Edition, EPA/600/4-89/001, March, 1989 or subsequent editions) and Supplement to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Revision 1, EPA/600/4-89/001a, September, 1989), using the most sensitive test organism as determined by PDMWD in the past. Chronic toxicity testing of one hundred percent (100%) effluent shall also be conducted once annually using the two other test species.

c. In the event that recommended species is/are not available or the prescribed tests are not successful due to no fault of the discharger, other species/tests may be substituted with the prior approval of the Regional Board.

d. Results of the interim toxicity monitoring program shall be summarized in a final report and shall be submitted to the Regional Board within 60 days of completion of all the tests discussed in a. and b. above. The final report shall include the following:

(1) For the acute toxicity tests, the results shall be reported as 96-hour LC-10 or LC-50, whichever is appropriate.

(2) For the chronic toxicity tests, the no-observable effect concentrations (NOEC) shall be reported. Additionally, the effect of the effluent stream on the growth, reproduction, and survival rate of each test species shall be discussed.

4. A quality assurance/quality control program shall be instituted for independent verification of the results generated by the effluent toxicity monitoring program. Twice during the interim toxicity monitoring program, and once annually thereafter, the discharger shall split samples with an independent laboratory for conducting tests specified under Item 1.a. and b., above. Prior approval of the Regional Board shall be obtained for the selection of the independent laboratory. Results from the independent laboratory shall be submitted to the Regional Board and the discharger for evaluation.

5. After analyzing the data generated from the interim toxicity monitoring program, this monitoring and reporting program may be revised to include revised biomonitoring and reporting programs. This may include a reduction or increase in the frequency of the sampling and testing.

6. If, in any acute toxicity test of 100% effluent, the effluent test result is statistically different from the control test result with a T-test, then the discharger will perform followup acute tests with a dillution series of effluent. The effluent concentrations will be 100%, 750/o, 50%, 25%, 12.5%. and a control containing no effluent. For chronic toxicity testing effluent concentrations shall be 100%, 75%, 50%, 25%, 12.5%, and a control containing no effluent. For both acute and chronic toxicity testing, a minimum of four replicates are required per concentration. The effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test must meet all test acceptability criteria specified in the acute and/or chronic toxicity testing manual. If the test acceptability criteria is not achieved, then the discharger shall re-test within 14 days. The test results must be reported according to the acute and/or toxicity testing manual chapter on report preparation, and shall be attached to the regular monitoring report. The discharger shall also submit the chronic toxicity data on a computer disk as specified in Suggested Standardized Reporting Requirements for Monitoring Chronic Toxicity SWRCB (February, 1993).

7. Toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for any of the tests.

F. MONITORING REPORT SCHEDULE

Monitoring reports shall be submitted to the Regional Board according to the dates in the following schedule:

Monitoring Frequency	Report Period	Report Due
Continuous, daily weekly, or monthly	January, February, March, April, May, June. July, August, September, October, November, December	By the 30th of the following month (February 28 for January)
Quarterly	January - March April - June July - September October - December	April 30th July 30th October 30th January 30th
Semiannually	January - June July - December	August 30th February 28th
Annually	January - December	February 28th

G. ANNUAL SUMMARY OF MONITORING DATA

By February 28th of each year the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements of this Order.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on April 14, 1999.

JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 98-60
NPDES PERMIT NO. CA0107492
WASTE DISCHARGE REQUIREMENTS
FOR
PADRE DAM MUNICIPAL WATER DISTRICT
PADRE DAM WATER RECYCLING FACILITY
DISCHARGE TO
SYCAMORE CREEK AND THE SAN DIEGO RIVER
SAN DIEGO COUNTY

The California Regional Water Quality Control Board (hereinafter Regional Board), finds that:

1. On June 21, 1993, this Regional Board adopted Order No. 93-48, National Pollutant Discharge Elimination System Permit No. CA0107492, *Waste Discharge Requirements for Padre Dam Municipal Water District, Santee Water Reclamation Plant Discharge to Sycamore Creek and the San Diego River, San Diego County.* Order No. 93-48 established requirements for the discharge of up to 2.0 million gallons per day (MGD) of treated sewage from the Padre Dam Water Recycling Facility (PDWRF), which was formerly called the Santee Water Reclamation Plant, through the Santee Lakes, to Sycamore Creek and the San Diego River. Order No. 93-48 contains an expiration date of June 21, 1998.

2. Pursuant to Reporting Requirement E.14 of Order No. 93-48, PDMWD was required to submit their report of waste discharge 180 days prior to the June 21, 1998 expiration date. On April 1, 1998 PDMWD submitted an application to renew its NPDES permit. The report of waste discharge included a request for changes to the NPDES permit. Because the application was submitted late, this Regional Board could not consider the requested changes at the time of adoption of this permit renewal.

3. PDMWD discharges effluent from the PDWRF into a series of seven man made lakes known as the Santee Lakes, a recreational facility owned and operated by PDMWD. These artificial lakes are not waters of the United States. Reclaimed wastewater from the lakes occasionally overflows from Lake No. 1 into Sycamore Creek, a tributary of the San Diego River. Sycamore Creek and the San Diego River are both waters of the United States.

4. PDMWD owns and operates the PDWRF located in Sycamore Canyon in Santee, California (Latitude- 32 Deg. 50 Min. 30 Sec. North, Longitude- 117 Deg. 00 Min. 10 Sec. West). Wastewater goes through primary sedimentation, Bardenpho biological nutrient removal activated sludge, secondary clarification, alum and polymer chemical addition, flocculation and sedimentation, denitrifying filtration, chlorine contact and dechlorination,

before being discharged to Lake No. 7. The State Department of Health Services has determined that this treatment train provides treatment and reliability equivalent to that specified for "filtered wastewater" as defined in Title 22, Division 4, of the California Code of Regulations.

5. PDMWD can regulate the influent flow to the PDWRF . The remainder of the District's untreated sewage flow is diverted to the San Diego metropolitan sewerage system for treatment at the E.W. Blom Point Loma Metropolitan Wastewater Treatment Plant. PDMWD has a contractual agreement with the City of San Diego to discharge up to 6.22 MGD to the metro system.

6. The Regional Board, acting in accord with Section 13244 of the California Water Code, adopted the Water Quality Control Plan for the San Diego Basin (9), (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the State Water Resources Control Board (hereinafter State Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan contains beneficial uses and water quality objectives. The requirements of this Order are consistent with the Basin Plan.

7. The discharge point is located in the Sycamore Canyon portion of the San Diego River watershed. The Basin Plan identifies the following beneficial uses of the San Diego River watershed downgradient of the discharge point:

   a. agricultural supply
   b. industrial service supply
   c. contact and non-contact water recreation
   d. warm freshwater habitat
   e. cold freshwater habitat
   f. wildlife habitat
   g. preservation of rare, threatened or endangered species

8. In order to protect designated beneficial uses, the Basin Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the inland surface waters, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions. The Basin Plan also contains prohibitions applicable to surface waters subject to tidal influence and for inland surface waters. The applicable prohibitions and discharge provisions of the Basin Plan have been incorporated herein.

9. This Order complies with Section 402(o) of the Federal Clean Water Act, and the implementing regulations of 40 CFR 122.44(l) which prohibit the establishment of effluent limits in a renewed, reissued or modified NPDES permits that are less stringent than the limits established in the previous permit.

10. On November 16, 1990, the United States Environmental Protection Agency promulgated NPDES permit application requirements for stormwater discharges (40 CFR Parts 122, 123, and 124) which are applicable to the PDMWD treatment facilities. On April 17, 1997 the State Water Resources Control Board adopted *Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System (NPDES) General Permit No. CASOOOOO1 Waste Discharge Requirements for Discharges of Storm Water Associated Activities Excluding Construction Activities.* Stormwater discharges from PDMWD's PDWRF are subject to the terms and conditions of Water Quality Order No. 97-03-DWQ.

11. Effluent limitations, industrial pretreatment standards, sludge use and disposal regulations, and criteria established under Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403 and 405 of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), are applicable to the discharge.

12. The Regional Board, in establishing the requirements contained herein, has taken into consideration the requirements of the State and Federal antidegradation policies and has determined that:

    a. The terms and conditions of this Order require that the existing beneficial uses and quality of Sycamore Creek, the San Diego River, and contiguous waters be maintained and protected;

    b. The discharge from the PDWRF to the San Diego River and its tributaries in accordance with approved plans indicated in the findings above, and the requirements of this Order, is necessary to accommodate social and economic development important to the people of the communities of the San Diego region and is to the maximum benefit of the people of the State;

    c. No surface waters covered under the terms and conditions of this Order have been designated an outstanding national resource water by the Sate Water Resources Control Board. No surface waters covered under this Order have been designated as Areas of Special Biological Significance by the State Water Resources Control Board. This Order prohibits the discharge of wastes to the waters of any ASBS.

13. This Order shall serve as an NPDES permit for the discharge of treated wastewater from the PDMWD's PDWRF to Sycamore Creek, the San Diego River, and contiguous waters pursuant to Section 402 of the CWA, and amendments thereto.

14. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;

b. Other waste discharges;
c. The need to prevent nuisance;
d. Past, present, and probable future beneficial uses of the waters under consideration;
e. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto;
f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
g. Economic considerations;
h. The need for developing housing within the region; and
i. The need to develop and use recycled water.

15. The issuance of waste discharge requirements for this discharge is exempt from the requirement for preparation of environmental documents under the CEQA (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

16. The Regional Board has considered all water resource related environmental factors associated with the discharge of treated wastewater from PDMWD's PDWRF to the San Diego River and contiguous waters.

17. The Regional Board has notified PDMWD and all know interested parties of its intent to issue NPDES permit requirements for the proposed discharge of treated wastewater.

18. The Regional Board has, at a public meeting, heard and considered all comments pertaining - to the discharge of treated wastewater from the PDWRF to the San Diego River and contiguous waters.

IT IS HEREBY ORDERED, that Padre Dam Municipal Water District (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the Provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following for the discharge of wastewater from the PDWRF to Sycamore Creek, the San Diego River and contiguous waters:

A. PROHIBITIONS

1. The discharge of waste at point(s) other than the discharge point from Lake No. 1 to Sycamore Creek, which have not been specifically described in the report of waste discharge and for which valid waste discharge requirements are not in force, is prohibited.

2. The discharge of wastes to areas designated as being of special biological significance by the State Water Resources Control Board is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

3. The discharge of oil, trash or other solids directly to a surface water or in any manner which may permit it to be washed into a surface water is prohibited.

4. The discharge of waste shall not cause surface erosion or scouring of aquatic substrates.

5. The discharge of municipal waste sludge directly to the San Diego River and/or its tributaries, or into a waste stream that discharges to the San Diego River and/or its tributaries is prohibited.

6. The by-passing of untreated wastes to the San Diego River and/or its tributaries, except as authorized in Provision D. 22 of this Order, is prohibited.

7. Discharge to the San Diego River and contiguous waters from the PDWRF at average daily flowrate in excess of 2.0 MGD is prohibited unless the discharger obtains revised waste discharge requirements authorizing an increased flowrate. This flowrate limitation may be revised by the Regional Board at any time if it is shown that the discharge of freshwater from PDWRF adversely affect the estuary. The Regional Board may revise this flowrate limitation to make it more or less stringent.

8. The discharge shall not:

   (a) Cause the presence of coliform or pathogenic organisms in waters pumped from the affected basins;

   (b) Cause the occurrence of objectionable tastes and odors in waters pumped from the affected basin;

   (c) Cause waters pumped from the affected basins to foam;

   (d) Cause the presence of toxic materials in waters pumped from the affected basins;

   (e) Cause concentrations of any contaminant in excess of the maximum contaminant level specified in Title 22, Chapter 15, Article 4, Section 64435, Tables 2 and 4 of the California Code of Regulations in waters pumped from the affected basins;

   (f) Cause the pH of waters pumped from the affected basins to fall below 6.0 or rise above 9.0;

   (g) Cause this Regional Board's groundwater objectives as established in the Basin Plan, to be exceeded;

   (h) Cause a nuisance or adversely affect beneficial uses for the surface waters, as established in the Basin Plan;

(i) Cause odors, septicity, mosquitoes or other vectors, weed growth or other nuisance conditions in the San Diego River and/or its tributaries;

(j) Cause concentrations of unionized ammonia (NH_3) to exceed 0.025 mg/l as (N) in receiving waters.

9. The discharge of any substances in concentrations toxic to human, animal, plant or aquatic life is prohibited.

10. The discharger shall not cause a violation of the waste discharge prohibitions contained in the Basin Plan (listed in Attachment No. 1 to this Order).

B. DISCHARGE SPECIFICATIONS

1. The discharge of treated wastewater from the PDWRF and Lake No. I to Sycamore Creek, the San Diego River, and contiguous waters containing pollutants in excess of the following effluent limitations is prohibited:

a. BASIN PLAN-EFFLUENT LIMITATIONS FOR GENERAL WASTE CONSTITUENTS

Constituent	Units	30-Day Average	Weekly Average	Daily Maximum
settleable solids	ml/L	0.1	--	0.2
biological oxygen demand(5-d,20 deg. C)	mg/L	15	23	25
	lb/d	250	375	417
total suspended solids	mg/L	15	23	25
	lb/d	250	375	417
percent sodium	%	--	--	60
total nitrogen				
April 1-Sept. 30	mg/L	3.0	--	5.0
	lb/d	50	--	83.2
Oct. 1- Mar. 31	mg/L	6.0	--	10.0
	lb/d	100	--	166.4
total phosphorous				
April 1-Sept. 30	mg/L	0.5	--	0.8
	lb/d	8.3	--	13.3
Oct. 1 -Mar. 31	mg/L	1.0	--	1.6
	lb/d	16.6	--	26.6
MBAS	mg/L	--	--	0.5
	lb/d	--	--	8.3
fluoride	mg/L	--	--	1.0
	lb/d	--	--	16.6
hydrogen sulfide	ug/L	2	4	10
	lb/d	0.0334	0.0667	0.1668

a. BASIN PLAN-EFFLUENT LIMITATIONS FOR GENERAL WASTE CONSTITUENTS-Continued

Constituent	Units	30-Day Average	Weekly Average	Daily Maximum
chlorine residual	ug/L	2.0	8.0	20
	lb/d	0.0334	0.1334	0.3336
boron	mg/L	--	--	1.0
	lb/d	--	--	16.6
sulfate	mg/L	--	--	500
	lb/d	--	--	8320
chloride	mg/L	--	--	400
	lb/d	--	--	6672
manganese	mg/L	--	--	1.0
	lb/d	--	--	16.6
odor	units	none	none	none
color	units	20	--	40
total dissolved solids	mg/L	--	--	1500
	lb/d	--	--	24960
oil and grease	mg/L	5	--	7.5
	lb/d	83.2	--	124.8
iron	mg/l	--	--	1.0
	lb/d	--	--	16.6

b. EFFLUENT LIMITATIONS FOR PROTECTION OF FRESHWATER AQUATIC LIFE

Constituent	Units	4-day Average	Daily Average	1 -hour Average	Instant-aneous Max.
arsenic	ug/L	190	--	360	--
cadmium	ug/L	b	--	b	--
chlordane	ng/L	--	4.3	--	--
chromium (VI)[a]	ug/L	11	--	16	--
chromium (III)	ug/L	509	--	4270	--
cyanide	ug/L	5.2	--	22	--
copper	ug/L	c	--	c	--
DDT	ng/L	--	1.0	--	--
dieldrin	ng/L	--	1.9	--	--
endosulfan	ng/L	--	56	--	220
endrin	ng/L	--	2.3	--	180
heptachlor	ng/L	--	3.8	--	--
hexachlorocyclo-hexane-gamma	ng/L	--	80	--	--
lead	ug/L	d	--	d	--
mercury	ug/L	--	--	2.4	--
nickel	ug/L	e	--	e	--
PCBs	ng/L	--	14	--	--

b. EFFLUENT LIMITATIONS FOR PROTECTION OF FRESHWATER AQUATIC LIFE-Continued

Constituent	Units	4-day Average	Daily Average	1 -hour Average	Instant-aneous Max.
pentachlorophenol	ug/L	h	--	h	--
selenium	ug/L	5.0	--	20	--
silver	ug/L	--	--	--	f
toxaphene	ng/L	0.2	--	730	--
tributyltin	ng/L	20[i]	40	--	60
zinc	ug/L	9	--	9	--

mg/L = milligram(s) per liter; ug/L = microgram(s) per liter;
ng/L = nanogram(s) per liter; pg/L = picogram(s) per liter;
"--" = Not applicable

a) The discharger may at its option, meet this limitation as total chromium.

b-g) Effluent limits for these metals are expressed by the following formulas, where H = In (effluent hardness) in mg/L as $CaCO_3$.

b) 4-DAY AVERAGE CADMIUM = $e^{O.7852H-3.490}$; 1-HOUR AVERAGE CADMIUM = $e^{1.128H-3.828}$.

c) 4-DAY AVERAGE COPPER = $e^{O.8545H-1.465}$; 1-HOUR AVERAGE COPPER = $e^{O.9422H-1.460}$.

d) 4-DAY AVERAGE LEAD = $e^{1.273H-4.705}$; 1-HOUR AVERAGE LEAD = $e^{1.273H-1.460}$.

e) 4-DAY AVERAGE NICKEL = $e^{O.846H+1.1645}$; 1-HOUR AVERAGE NICKEL = $e^{O.846H+3.3612}$.

f) INSTANTANEOUS MAXIMUM SILVER-R = $e^{1.72H-6.52}$.

b. EFFLUENT LIMITATIONS FOR PROTECTION OF FRESHWATER AQUATIC LIFE-Continued

g) 4-DAY AVERAGE ZINC = $e^{O.8473H+0.7614}$; 1 -HOUR AVERAGE ZINC = $e^{O.8473H+ 0.8604}$.

h) 4-DAY AVERAGE PENTACHLOROPHENOL = $e^{1.005(pH)-5.290}$; 1-HOUR AVERAGE PENTACHLOROPHENOL = $e^{1.005(pH) - 4.830}$.

i) Six-month median

c. EFFLUENT LIMITATIONS FOR THE PROTECTION OF HUMAN HEALTH

Constituent	Units	30-Day - Average
NONCARCINOGENS		
1,2-dichlorobenzene	mg/L	18
1,3-dichlorobenzene	ug/L	2600
endosulfan	ug/L	2.0
endrin	ug/L	0.8
fluoranthene	ug/L	42
mercury	ng/L	12
toluene	mg/L	300
acrolein	ug/L	780
antimony	mg/L	4.3
bis(2-chloroiso-propyl)ether	mg/L	170
chlorobenzene	mg/L	4.5
dibutylphthalate	mg/L	12
diethylphthalate	mg/L	120
2,4-dimethylphenol	mg/L	2.3
dimethylphthalate	mg/L	2900
4,6-dinitro-2-methylphenol	ug/L	770
2,4-dinitrophenol	mg/L	14
ethylbenzene	mg/L	29
hexachlorocyclo-pentadiene	mg/L	17
nitrobenzene	mg/L	1.9
thallium	ug/L	370
1, 1, 1 -trichloroethane	mg/L	11
CARCINOGENS		
aldrin	pg/L	140
benzene	ug/L	21
chlordane	pg/L	81
chloroform	ug/L	480
DDT	pg/L	600
1,4-dichlorobenzene	ug/L	64
dichloromethane	ug/L	1600
dieldrin	pg/L	140
halomethanes	ug/L	480
heptachlor	ng/L	0.17
heptachlor epoxide	ng/L	0.07
hexachlorobenzene	ng/L	690

c. EFFLUENT LIMITATIONS FOR THE PROTECTION OF HUMAN HEALTH-Continued

Constituent		Units	30-Day - Average
CARCINOGENS-Continued			
hexachlorocyclohexane			
	alpha	ng/L	13
	beta	ng/L	46
	gamma	ng/L	62
PAHs		ng/L	31
PCBs		pg/L	70
pentachlorophenol		ug/L	8.2
TCDD equivalents		pg/L	0.014
toxaphene		pg/L	690
2,4,6-trichlorophenol		ug/L	1.0
acrylonitrile		ug/L	0.36
benzidine		ng/L	0.2
beryllium		ug/L	0.13
bis(2-chloroethyl)ether		ug/L	0.62
bis(2-ethylhexyl)-phthalate		ug/L	9.9
carbon tetrachloride		ug/L	3.8
3,3-dichlorobenzidine		ug/L	0.03
1,2-dichloroethane		ug/L	130
1, 1 -dichloroethylene		ug/L	3.2
1,3-dichloropropene		ug/L	31
2,4-dinitrotoluene		ug/L	9.1
1,2-diphenylhydrazine		ug/L	0.54
hexachlorobutadiene		ug/L	50
hexachloroethane		ug/L	8.9
isophorone		ug/L	610
N-nitrosodimethylamine		ng/L	26
N-nitrosodiphenylamine		ug/L	8.8
1,1,2,2-tetrachloroethane		ug/L	11
tetrachloroethylene		ug/L	6.9
1,1,2-trichloroethane		ug/L	42
trichloroethylene		ug/L	92
vinyl chloride		ug/L	34

mg/L = milligram(s) per liter; ug/L = microgram(s) per liter; ng/L = nanogram(s) per liter; pg/L = picogram(s) per liter; "--" = Not applicable

2. The Mass Emission Rate (MER) limits in this Order were calculated using a Q = 2.0 MGD and the indicated C values. When the discharge flowrate is lower than 2.0 MGD, the MER limits shall be correspondingly lower.

3. Compliance with the daily, 4-Day, 30-day, and the 12-month average limits specified in the Discharge Specifications shall be determined from the flow-weighted average of all samples taken during the specified periods. Compliance with the instantaneous and one-hour average limits specified in Discharge Specifications shall be determined from the results of grab samples taken during the specified periods.

4. The pH of the discharge shall be at all times within the range of 6.5 and 8.5 pH units.

5. There shall be no visible oil or grease in the discharge.

6. The discharge of treated wastewater from the PDWRF to the San Diego River or its tributaries shall be adequately disinfected, oxidized, coagulated, clarified, filtered wastewater (tertiary treated effluent) or equivalent, pursuant to Title 22, Division 4, Chapter 3, Article 5, Section 60315 of the California Code of Regulations. The wastewater shall be considered adequately disinfected if in the effluent the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed. Filtered wastewater means an oxidized, coagulated, and clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth (or equivalent as determined by the State Department of Health Services), so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period. The discharge of treated wastewater from the PDWRF to the San Diego River and/or its tributaries, in excess of 2.0 MGD or from the modified treatment facilities, shall not occur until the discharger obtains written authorization from the Regional Board Executive Officer.

7. Treated wastewater from the PDWRF discharged to the San Diego River and contiguous waters must be essentially free of:

   a. Material that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that form sediments which degrade benthic communities or other aquatic life.

   c. Substances which will accumulate to toxic levels in aquatic sediments or biota.

d. Substances that significantly decrease the natural light to benthic communities and other aquatic life.

e. Materials that result in aesthetically undesirable discoloration of surface waters.

8. Waste discharges from the PDWRF shall be discharged in such a manner as to provide maximum protection to aquatic environments.

9. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

10. All waste treatment. containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from 100-year frequency 24-hour storm.

11. Collected screenings, sludges, and other solids removed from liquid wastes, shall be disposed of in a manner approved by the Executive Officer of the Regional Board.

12. The discharge shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

C. RECEIVING WATER LIMITATIONS

The discharge from the PDWRF shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in surface waters:

1. Bacterial Characteristics of Inland Surface Waters Including Bays and Estuaries

(a) Water-Contact and Non-Contact Standards

In waters designated for contact recreation (REC1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 ml, nor shall more than 10 percent of total samples taken during any 30-day period exceed 400 per 100 ml.

In waters designated for noncontact recreation (REC2), and not designated for contact recreation (REC1), the average fecal coliform concentration for any 30-day period, shall not exceed 2,000 per 100 ml nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 per 100 ml.

In bays and estuaries, the most probable number of coliform organisms in the upper 60 feet of the water column shall be less than 1,000 per 100 ml provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml.

(b) Shellfish

At all areas where shellfish may be harvested for human consumption (SHELL), the median total coliform concentration for any 30-day period shall not exceed 70 per 100 ml nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 per 100 ml for a five-tube decimal dilution test or 330 per 100 ml when a three-tube decimal dilution test is used.

2. Physical Characteristics of Surface Waters

a. Floating particulates and grease and oil shall not be visible.

b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface water.

c. Natural light shall not be significantly reduced as a result of the discharge of treated wastewater.

d. The rate of deposition of solids and the characteristics of solids in receiving water sediments shall not be changed such that benthic communities are degraded.

e. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.

3. Chemical Characteristics of Surface Waters

a. Dissolved oxygen levels shall not be less than 5.0 mg/l in inland surface waters with designated WARM beneficial use. The annual mean dissolved oxygen concentration shall not be less than 7 mg/l more than 10 percent of the time.

b. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated warm freshwater habitat (WARM) beneficial uses. In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0 In inland surface waters the pH shall not be depressed below 6.5 nor raised above 8.5.

c. The dissolved sulfide concentration of waters in and near sediments and throughout the water column shall not be significantly increased above that present under natural conditions.

d. The concentration of organic materials in receiving water sediments shall not be increased to levels which would degrade aquatic life.

e. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.

4. Biological Characteristics of Surface Waters

a. Inland surface water communities and populations, including vertebrate, invertebrate, and plant species, shall not be degraded.

b. The natural taste, odor, and color of fish, shellfish, or other inland surface water resources used for human consumption shall not be impaired.

c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

d. The concentration of contaminants in waters which are existing or potential sources of drinking water shall not occur at levels which are harmful to human health.

5. The discharge shall not result in acute toxicity in receiving waters.

6. The discharge shall not result in chronic toxicity in receiving waters.

7. The discharge shall not cause the presence of radionuclides in concentrations that exceed the maximum permissible concentrations for radionuclides in water set forth in Chapter 5, Title 17 of the California Code of Regulations.

8. The discharge shall not cause the dissolved oxygen concentration of the San Diego River or contiguous waters to be depressed below 5.0 mg/I. If the ambient dissolved oxygen concentration is less than 5.0 mg/l. the discharge shall not cause a further depression.

9. The discharge shall not cause the natural receiving water temperature to be altered.

D. PROVISIONS

1. The discharger must comply with all conditions of this Order. Any permit noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a renewal application.

2. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncomplying discharge.

3. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

   a. Violation of any terms or conditions of this Order;

   b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or

   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.

4. Notwithstanding Provision 3 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act (CWA) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this Order, this Order shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the discharger so notified.

5. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA or amendments thereto, the Regional Board will revise and modify this Order in accordance with the more stringent standards.

6. The discharger shall comply with effluent standards and prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sludge use and disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish those standards or prohibitions or standards for sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.

7. The discharger shall give prior written notice to the Executive Officer of any change(s) planned in the discharger's sludge use or disposal practice.

8. This Order is not transferable to any person except after notice to the Executive Officer of this Regional Board. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code and the CWA. The discharger shall submit notice of any transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement E.4.

9 This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property of another, nor protect the discharger from its liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue its waste discharge.

10. The discharger shall allow the Regional Board, or an authorized representative or any representative of the United States Environmental Protection Agency upon the presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, including sludge use and disposal activities, or where records must be kept under the conditions of this Order;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operation regulated or required under this Order; and

    d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the CWA or California Water Code, any substances or parameters at any location.

11. The discharger shall, at all times, properly operate and maintain all facilities and systems treatment and control (and related appurtenances) which are installed or used by the

discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

12. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced or is lost.

13. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

14. The discharger shall comply with any interim effluent limitations as established by addendum. enforcement action or revised waste discharge requirements which have been or may be adopted by this Regional Board.

15. All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-rating of an existing treatment facility. For new treatment facilities and expansions, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:

    a Identify the design capacity of the treatment facility;

    b. Certify the adequacy of each component of the treatment facility; and

    c. Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of how the process and physical design of the facility will ensure compliance with this Order.

    The signature and engineering license number of the engineer preparing the certification initiate a discharge to the San Diego River and contiguous waters from an existing treatment facility at a flowrate in excess of its previously approved design capacity until:

a. The certification report is received by the Executive Officer;

b. The Executive Officer has received written notification of the completion of construction (new treatment facilities and expansions only);

c. An inspection of the plant has been made by the Regional Board staff (new treatment facilities and expansions only); and

d. The Executive Officer has provided the discharger with written authorization to discharge from the treatment facility to the San Diego River or its tributaries at a flowrate not to exceed the revised treatment facility design capacity.

16. The discharger shall comply with requirements for the control of pollutants in stormwater runoff established by agencies having jurisdiction over stormwater conveyance systems serving the discharger's facilities.

17. The discharger's wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 4, Subchapter 14, Title 23 of the California Code of Regulations.

18. The discharger shall implement a Nonindustrial Source Control Program consisting of a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into the sanitary sewer system. The Nonindustrial Source Control Program shall be reviewed by the discharger and, if necessary, updated at least once during the life of this Order.

19. A copy of this Order shall be posted at a prominent location at or near the treatment and disposal facilities, and shall be available to operating personnel at all times.

20. This Order may be modified in accordance with the requirements set forth in 40 CFR Parts 122 and 124, to include appropriate conditions or limits to address demonstrated effluent toxicity based upon newly available information or the results of the monitoring required in MRP 98-60, and/or to implement new or revised water quality standards for acute and chronic toxicity approved by this Regional Board, the State Water Resources Control Board, and/or the United States Environmental Protection Agency.

21. Order No. 93-48 is rescinded when this Order becomes effective according to Notification No. H.7 of this Order.

22. Bypass

a. Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operations. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

c. Notice

(1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, they shall submit prior notice, if possible, at least ten days before the date of the bypass.

(2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as described under **Reporting Requirement E.6.**

d. Prohibition of Bypass

(1) Bypass is prohibited and the RWQCB may take enforcement action against the discharger for bypass, unless:

(2) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(3) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste or maintenance during normal periods of equipment downtime. This condition is not satisfied if the discharger could have installed adequate backup equipment to prevent a bypass which occurs during normal periods of equipment downtime or preventive maintenance; and

(4) The discharger submitted notices as required under paragraph (c) of this section.

e. The Executive Officer may approve an anticipated bypass, after considering its adverse effect, it the Executive Officer determines that it will meet the three conditions listed above in paragraph (d) of this section.

23. Upset

a. Definitions

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions Necessary for a Demonstration of Upset

A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the discharger can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The discharger submitted notice of the upset as required in **Reporting Requirement E.6.**

d. Burden of Proof

In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

24. Pollution, Contamination, Nuisance

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

E. REPORTING REQUIREMENTS

1. The discharger shall meet the design, operational, and reliability, requirements of Articles 7, 8, 9 and 1 0 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The discharger shall develop an engineering report conforming to Section 60323, Article 7 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The engineering report shall be submitted to the State Department of Health Services, the San Diego County Department of Environmental Health , and the Regional Board Executive Officer. The discharge of treated wastewater from the PDWRF to the San Diego River and/or its tributaries, in excess of 2.0 MGD or from the modified treatment facilities, shall not occur until the engineering report is approved by the Regional Board Executive Officer.

2. The discharger shall file a new Report of Waste Discharge not less than 180 days prior to the following:

   a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.

   b. Significant change in disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).

   c. Significant change in disposal area (e.g., moving the discharge to a disposal area significantly removed from the original area, potentially causing a different water quality or nuisance problem).

   d. Increase in flow beyond that specified in this Order.

   e. Other circumstances which result in a material change in character, amount, or location of the waste discharge.

   f. Any planned physical alterations or additions to the permitted facility.

3. The discharger shall give advance notice to the Executive Officer of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this Order.

4. The discharger must notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharge and the new discharger. This agreement shall include an

a. Any new introduction of pollutants into the discharger's treatment works from an indirect discharger which would be subject to Sections 301 or 306 of the CWA if the were directly discharging those pollutants.

b. Any planned physical alterations or additions to the permitted facility, where such alterations, additions, or changes may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional disposal sites not reported during the permit application process.

10. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge, or submitted incorrect information in a Report of Waste Discharge, or in any report to the Regional Board, it shall promptly submit such facts or information.

11. If a need for a discharge bypass is known in advance, the discharger shall submit prior notice and, if at all- possible, such notice shall be submitted at least ten days prior to the date of the bypass.

12. The discharger shall develop and implement a BMP plan approved by the Executive Officer pursuant to Section 304(e) of the CWA. The discharger shall implement the BMP plan to assist in the prevention of, or minimize the potential for, the release of hazardous and/or toxic pollutants from ancillary activities to the San Diego River or its tributaries through plant site runoff, spillage or leaks, sludge or waste disposal. The proposed plan shall be developed and submitted to the Executive Officer for approval within six months of the issuance of this Order and shall be implemented as soon as practicable, but not later than one year after the effective date of this Order unless a later date is specified by the Executive Officer. All revisions to the BMP plan shall be subject to the approval of the Executive Officer. A copy of this BMP plan shall be kept at the PDWRF and be available to operating personnel at all times.

13. The discharger shall file a written report with this Regional Board within 90 days after the average dry weather waste flowrate for any 30-day period equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities, which is 75% of the combined capacity of the PDWRF and PDMWD's contractual capacity in the San Diego metro system. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policymaking body is adequately informed about it. The report shall include:

a. Average daily flow for the 30-day period, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

b. The discharger's best estimate of when the average daily dry-weather flowrate will equal or exceed the design capacity of the facilities.

acknowledgment that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

5. The discharger shall comply with the attached Monitoring and Reporting Program No. 98-60. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 98-60.

6. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrences must be reported to the Executive Officer within 24 hours:

   a. Any bypass from any portion of the treatment facility

   b. Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstance.

   c. Any treatment plant upset which causes the effluent limitations of this Order to be exceeded.

   d. Violation of a daily maximum or instantaneous maximum effluent limitation as specified in Discharge Specification B. 1 of this Order.

   e. Any violation of the prohibitions of this Order.

7. The discharger shall report sewer overflow events in accordance with Order No. 96-04, *General Waste Discharge Requirements Prohibiting Sanitary Sewer Overflows by Sewage Collection Agencies.*

8. The discharger shall furnish to the Executive Officer, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order, or to determine compliance with this Order. The discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.

9. The discharger shall provide adequate notice to the Executive Officer of the following:

c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities and/or control the flowrate before the waste flowrate equals the capacity of present units.

14. This Order expires on June 21, 2003. If the discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain new waste discharge requirements. The discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations not later than 180 days in advance of the expiration date, as application for issuance of new waste discharge requirement. The terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with.

15. All applications, reports, or information submitted to the Executive Officer of this Regional Board shall be signed and certified.
    a. The Report of Waste Discharge shall be signed as follows:

        1. **For a corporation** - by a principal executive officer of at least the level of vice-president.

        2. **For a partnership or sole proprietorship** - by a general partner or the proprietor, respectively.

        3. **For a municipality, state federal or other public agency** - by either a principal executive officer or ranking elected official.

    b. All other reports required by this Order and other information requested by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:

        1. The authorization is made in writing by a person described in paragraph (a) of this provision:

        2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent. or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

        3. The written authorization is submitted to the Executive Officer.

    c. Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

16. Except for data determined to be confidential under Title 40, Code of Federal Regulations Part 2 (40 CFR Part 2), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region. As required by the CWA, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.

17. The discharger shall submit reports to all appropriate agencies as required under this Order. These agencies include the Regional Board and EPA. Reports shall be submitted to the Regional Board and EPA at the following addresses:

    a. Executive Officer
    California Regional Water Quality Control Board San Diego Region
    9771 Clairemont Mesa Blvd., Suite B
    San Diego, California 92124-1331

    b. Regional Administrator
    U.S. Environmental Protection Agency Region 9
    75 Hawthorne Street
    San Francisco, CA 94105

18. If the discharger's wastewater treatment plant is publicly owned or subject to regulation by the California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade.

19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. SLUDGE REQUIREMENTS

1. The discharger shall comply with all federal and state regulations pertaining to sludge use and disposal. Current federal regulations regarding the application of sludge containing cadmium and PCBs to land are contained in 40 CFR 257.3-5.

2. The discharger shall comply with the standards for sludge use and disposal promulgated under Section 405(d) of the Clean Water Act in 40 CFR 503, that are applicable to the

discharger's sludge treatment, use, or disposal practices.

3. The discharger is encouraged to comply with the State of California guidance manual issued by the Department of Health Services entitled "Manual of Good Practice for Landspreading of Sewage Sludge".

G. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

   No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights.

2. The CWA provides that any person who violates a condition of this Order implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a civil penalty not to exceed $10,000 Per day of such violations. Any person who willfully or negligently violates conditions of this Order implementing Section 301, 302, 306, 307 or 308 of the CWA is subject to a fine of not less than $2,500 nor more than $25.000 per day of violation, or by imprisonment for not more than one year, or both.

3. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

4. Nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.

5. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.

6. Nothing in this Order shall be construed to preclude institution of any legal action or relieve the discharger from any responsibilities , liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.

7. This Order shall become effective 30 days after the date of its adoption, provided the Regional Administrator, United States Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the Regional Water Quality Control Board, San Diego Region on June 10, 1998.

JOHN H. ROBERTUS
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 98-60
NPDES PERMIT NO. CA0107492
FOR
PADRE DAM MUNICIPAL WATER DISTRICT
SANTEE WATER RECLAMATION PLANT
DISCHARGE TO
SYCAMORE CREEK AND THE SAN DIEGO RIVER
SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy aid reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 5 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

   a. "Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)

   b. "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127, 19/2:W29/2, Stock No. S/N 24003-0027.)

   c. "Flow, Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy of microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB273-535/5ST.)

   d. "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. Publication MCD-51, 1977, 140 pp. (Available from the

General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225).

3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified this Order.

4. Published values for MDLs (defined below) and PQLs (defined below) should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Executive Officer will determine appropriate values based on available information, including information submitted by the discharger upon request by the Executive Officer.

   a) The Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix B.

   b) The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within $\pm$20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.

5. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Service or a laboratory approved by the Executive Officer.

6. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.

7. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 (CFR), Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

8. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge of when requested by the Regional Board Executive Officer or the United States Environmental Protection Agency.

9. Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individuals who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The laboratory and individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of all such analyses.

10. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Executive Officer or in this Order.

11. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Executive Officer a written statement signed by a registered professional engineer certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required by Monitoring Provision A.2.

12. All analytical data shall be reported uncensored with method detection limits (MDLs) and either practical quantitation levels (PQLs) or limits of quantitation (LOQs) identified. Acceptance of data should be based on demonstrated laboratory performance.

13. The discharger shall report all instances of noncompliance not reported under Reporting Requirement No. E.6 of Order No. 98-60 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement No. E.6.

14. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement No. E. 15.

15. A composite sample is defined as a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory - each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the precious aliquot. Aliquots may be collected manually or automatically.

16. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

17. Reports of monitoring surveys conducted to meet receiving water monitoring requirements of this monitoring and reporting program shall include, as a minimum, the following information:

    a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, time of sampling, etc.).

b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediments, rocks, etc.)

c. A description of the sample collection and preservation procedures used in the survey.

d. A description of the specific method used for laboratory analysis.

e. An in-depth discussion of the results of the survey. The discussion shall compare data from the reference station(s) with data from the stations located in the area of the discharge. All tabulations and computations shall be explained.

18. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN/100 ml. The detection method used for each analysis shall be reported with the results of the analysis.

19. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method approved by the Executive Officer.

20. The purpose of this monitoring program is to:

    a. Determine compliance with the terms and conditions of Order No. 98-60.

    b. Determine that the applicable State and federal water quality standards are met.

21. Revisions to this MRP may be made by the Executive Officer at any time during the term Order No. 98-60, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

22. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by January 30 of each year which summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. The discharger should have a success rate equal to or greater than 80 percent.

B. INFLUENT MONITORING

Influent monitoring is required to determine the effectiveness of a pretreatment program and assess treatment plant performance. The sampling station shall be located upstream of any in-plant return flows and where a representative sample of the influent to the treatment plant can be obtained. The date and time of sampling shall be reported with the analytical values determined. The following table shall constitute the influent monitoring program. The Executive Officer may reduce the monitoring frequency for those constituents required to be sampled/analyzed quarterly to an annual sampling/analyses requirement, for those constituents found to be below acceptable detection limits (40 CFR 136) after four quarters of monitoring.

1. INFLUENT SAMPLING AND ANALYSIS REQUIREMENTS

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous
specific conductance	umhos/cm	Recorder	Continuous
pH	pH Units	Recorder	Continuous
BOD(5-d,20-C)	mg/L	24 Hr. Composite	Daily
COD	mg/L	24 Hr. Composite	Daily
total suspended solids	mg/L	24 Hr. Composite	Daily
ammonia nitrogen	mg/L	Grab	Monthly
total nitrogen	mg/L	24 Hr. Composite	Monthly
total phosphorous	mg/L	24 Hr. Composite	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Monthly
total hardness	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
arsenic	ug/L	24 Hr. Composite	Quarterly
cadmium	ug/L	24 Hr. Composite	Quarterly
chlordane	ng/L	24 Hr. Composite	Quarterly
chromium (VI)	ug/L	24 Hr. Composite	Quarterly
chromium (III)	ug/L	24 Hr. Composite	Quarterly
cyanide	ug/L	24 Hr. Composite	Quarterly
copper	ug/L	24 Hr. Composite	Quarterly
DDT	ng/L	24 Hr. Composite	Quarterly
dieldrin	ng/L	24 Hr. Composite	Quarterly
endosulfan	ng/L	24 Hr. Composite	Quarterly
endrin	ng/L	24 Hr. Composite	Quarterly
heptachlor	ng/L	24 Hr. Composite	Quarterly
hexachlorocyclo-hexane-gamma	ng/L	24 Hr. Composite	Quarterly
lead	ug/L	24 Hr. Composite	Quarterly
mercury	ug/L	24 Hr. Composite	Quarterly
nickel	ug/L	24 Hr. Composite	Quarterly
PCBs	ng/L	24 Hr. Composite	Quarterly
pentachlorophenol	ug/L	24 Hr. Composite	Quarterly
selenium	ug/L	24 Hr. Composite	Quarterly
silver	ug/L	24 Hr. Composite	Quarterly
toxaphene	ng/L	24 Hr. Composite	Quarterly
tributyltin	ng/L	24 Hr. Composite	Quarterly
zinc	ug/L	24 Hr. Composite	Quarterly

1. **INFLUENT SAMPLING AND ANALYSIS REQUIREMENTS-Continued**

Parameter	Units	Type of Sample	Sample/Analysis Frequency
1,2-dichlorobenzene	mg/L	24 Hr. Composite	Annual
1,3-dichlorobenzene	ug/L	24 Hr. Composite	Annual
endosulfan	ug/L	24 Hr. Composite	Annual
endrin	ug/L	24 Hr. Composite	Annual
fluoranthene	ug/L	24 Hr. Composite	Annual
mercury	ng/L	24 Hr. Composite	Annual
toluene	mg/L	Grab	Annual
acrolein	ug/L	Grab	Annual
antimony	mg/L	24 Hr. Composite	Annual
bis(2-chloroiso-propyl)ether	mg/L	24 Hr. Composite	Annual
chlorobenzene	mg/L	Grab	Annual
dibutylphthalate	mg/L	24 Hr. Composite	Annual
diethylphthalate	mg/L	24 Hr. Composite	Annual
2,4-dimethylphenol	mg/L	24 Hr. Composite	Annual
dimethylphthalate	mg/L	24 Hr. Composite	Annual
4,6-dinitro-2-methylphenol	ug/L	24 Hr. Composite	Annual
2,4-dinitrophenol	mg/L	24 Hr. Composite	Annual
ethylbenzene	mg/L	Grab	Annual
hexachlorocyclo-pentadiene	mg/L	24 Hr. Composite	Annual
nitrobenzene	mg/L	24 Hr. Composite	Annual
thallium	ug/L	24 Hr. Composite	Annual
1, 1, 1 -trichloroethane	mg/L	Grab	Annual
aldrin	pg/L	24 Hr. Composite	Annual
benzene	ug/L	Grab	Annual
chlordane	pg/L	24 Hr. Composite	Annual
chloroform	ug/L	Grab	Annual
DDT	pg/L	24 Hr. Composite	Annual
1,4-dichlorobenzene	ug/L	24 Hr. Composite	Annual
dichloromethane	ug/L	Grab	Annual
dieldrin	pg/L	24 Hr. Composite	Annual
halomethanes	ug/L	Grab	Annual
heptachlor	ng/L	24 Hr. Composite	Annual
heptachlor epoxide	ng/L	24 Hr. Composite	Annual
hexachlorobenzene	ng/L	24 Hr. Composite	Annual
hexachlorocyclohexane			
alpha	ng/L	24 Hr. Composite	Annual
beta	ng/L	24 Hr. Composite	Annual
gamma	ng/L	24 Hr. Composite	Annual

1. INFLUENT SAMPLING AND ANALYSIS REQUIREMENTS-Continued

Parameter	Units	Type of Sample	Sample/Analysis Frequency
PAHs	ng/L	24 Hr. Composite	Annual
PCBs	pg/L	24 Hr. Composite	Annual
pentachlorophenol	ug/L	24 Hr. Composite	Annual
TCDD equivalents	pg/L	24 Hr. Composite	Annual
toxapliene	pg/L	24 Hr. Composite	Annual
2,4,6-trichlorophenol	uglL	24 Hr. Composite	Annual
acrylonitrile	ug/L	24 Hr. Composite	Annual
benzidine	ng/L	24 Hr. Composite	Annual
beryllium	ug/L	24 Hr. Composite	Annual
bis(2-chloroethyl)ether	ug/L	24 Hr. Composite	Annual
bis(2-ethylhexyl)-phthalate	ug/L	24 Hr. Composite	Annual
carbon tetrachloride	ug/L	24 Hr. Composite	Annual
3,3-dichlorobenzidine	ug/L	24 Hr. Composite	Annual
1,2-dichloroethane	ug/L	Grab	Annual
1, 1 -dichloroethylene	ug/L	24 Hr. Composite	Annual
1,3-dicl-iloropropene	ug/L	24 Hr. Composite	Annual
2,4-dinitrotoluene	ug/L	24 Hr. Composite	Annual
1,2-diphenylhydrazine	ug/L	24 Hr. Composite	Annual
hexachlorobutadiene	ug/L	24 Hr. Composite	Annual
hexachloroethane	ug/L	24 Hr. Composite	Annual
isophorone	ug/L	24 Hr. Composite	Annual
N-nitrosodimethylamine	ng/L	24 Hr. Composite	Annual
N-nitrosodiphenylamine	ug/L	24 Hr. Composite	Annual
1, 1,2.2-tetrachloro-ethane	ug/L	Grab	Annual
tetrachloroethylene	ug/L	Grab	Annual
1, 1,2-trichloroethane	ug/L	Grab	Annual
trichloroethylene	ug/L	Grab	Annual
vinyl chloride	ug/L	Grab	Annual

C. EFFLUENT MONITORING

Effluent monitoring is required to determine compliance with the permit conditions and to identify operational problems and improve plant' performance. Effluent monitoring also provides information on wastewater characteristics and flows for use in interpreting water quality and biological data.

Sample stations are a) at the point leaving the chlorine contact basin (after dechlorination), b) at the point where the effluent enters Lake No. 7 after alum addition and c) at the point where the effluent enters Lake No. 1. The date and time of sampling shall be reported with the analytical values determined.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the discharger shall monitor and record data for all of the parameters listed in the effluent monitoring schedule, after which the frequencies of analyses listed in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

The following table shall constitute the effluent monitoring program. The Executive Officer may reduce the monitoring frequency for those constituents required to be sampled/analyzed quarterly and semi-annually to an annual sampling/analyses requirement, for those constituents found to be below acceptable detection-limits (40 CFR 136) after four quarters of monitoring.

In conformance with federal regulations (40 CFR 122.45(c)), analyses to determine compliance with the effluent concentration limitations for heavy metals shall be conducted using the total recoverable method. For these constituents, if the discharger satisfactorily demonstrates to the Executive Officer an acid soluble/total recoverable method relationship, determination of compliance will be based on a comparison of the adjusted total recoverable method results to permit limits.

1. EFFLUENT SAMPLING AND ANALYSIS REQUIREMENTS

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous
specific conductance	umhos/cm	Recorder	Continuous
pH	pH Units	Recorder	Continuous
chlorine residual	ug/L	Recorder	Continuous
turbidity	NTU	Recorder	Continuous
BOD(5-d,20 deg. C)	mg/L	24-Hr. Composite	Daily
COD	mg/L	24-Hr. Composite	Daily
total suspended solids	mg/L	24-Hr. Composite	Daily
total/fecal Coliform	MPN/ 100 ml	Grab	Daily
ammonia nitrogen	mg/L	Grab	Weekly
total nitrogen	mg/L	24-Hr. Composite	Weekly
total phosphorous	mg/L	24 Hr. Composite	Weekly
oil and grease	mg/L	24 Hr. Composite	Monthly
color	units	Grab	Monthly
MBAS	mg/L	Grab	Monthly
percent sodium	%	Grab	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Monthly
total hardness	mg/L	24 Hr. Composite	Quarterly
total organic carbon	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
arsenic	ug/L	24 Hr. Composite	Quarterly
cadmium	ug/L	24 Hr. Composite	Quarterly
chromium (VI)	ug/L	24 Hr. Composite	Quarterly
chromium (III)	ug/L	24 Hr. Composite	Quarterly
cyanide	ug/L	24 Hr. Composite	Quarterly
copper	ug/L	24 Hr. Composite	Quarterly
DDT	ng/L	24 Hr. Composite	Quarterly
dieldrin	ng/L	24 Hr. Composite	Quarterly
endosulfan	ng/L	24 Hr. Composite	Quarterly
endrin	ng/L	24 Hr. Composite	Quarterly
heptachlor	ng/L	24 Hr. Composite	Quarterly
hexachlorocyclo-hexane-gamma	ng/L	24 Hr. Composite	Quarterly
lead	ug/L	24 Hr. Composite	Quarterly
mercury	ug/L	24 Hr. Composite	Quarterly
nickel	ug,/L	24 Hr. Composite	Quarterly
PCBs	ng/L	24 Hr. Composite	Quarterly

1. EFFLUENT SAMPLING AND ANALYSIS REQUIREMENTS-Continued

Parameter	Units	Type of Sample	Sample/Analysis Frequency
pentachlorophenol	ug/L	24 Hr. Composite	Quarterly
selenium	ug/L	24 Hr. Composite	Quarterly
silver	ug/L	24 Hr. Composite	Quarterly
toxaphene	ng/L	24 Hr. Composite	Quarterly
tributyltin	ng/L	24 Hr. Composite	Quarterly
zinc	ug/L	24 Hr. Composite	Quarterly
1,2-dichlorobenzene	mg/L	24 Hr. Composite	Annual
1,3-dichlorobenzene	ug/L	24 Hr. Composite	Annual
endosulfan	ug/L	24 Hr. Composite	Annual
endrin	ug/L	24 Hr. Composite	Annual
fluoranthene	ug/L	24 Hr. Composite	Annual
mercury	ng/L	24 Hr. Composite	Annual
toluene	mg/L	Grab	Annual
acrolein	ug/L	Grab	Annual
antimony	mg/L	24 Hr. Composite	Annual
bis(2-chloroiso-propyl)ether	mg/L	24 Hr. Composite	Annual
chlorobenzene	mg/L	24 Hr. Composite	Annual
dibutylphthalate	mg/L	24 Hr. Composite	Annual
diethylphthalate	mg/L	24 Hr. Composite	Annual
2,4-dimethylphenol	mg/L	24 Hr. Composite	Annual
dimethylphthalate	mg/L	24 Hr. Composite	Annual
4,6-dinitro-2-methylphenol	ug/L	24 Hr. Composite	Annual
2,4-dinitrophenol	mg/L	24 Hr. Composite	Annual
ethylbenzene	mg/L	Grab	Annual
hexachlorocyclo-pentadiene	mg/L	24 Hr. Composite	Annual
nitrobenzene	mg/L	24 Hr. Composite	Annual
thallium	ug/L	24 Hr. Composite	Annual
1, 1, I -trichloroethane	mg/L	Grab	Annual
aldrin	pg/L	24 Hr. Composite	Annual
benzene	ug/L	Grab	Annual
chlordane	pg/L	24 Hr. Composite	Annual
chloroform	ug/L	Grab	Annual
DDT	pg/L	24 Hr. Composite	Annual
1.4-dichlorobenzene	ug/L	24 Hr. Composite	Annual
dichloromethane	ug/L	Grab	Annual
dieldrin	pg/L	24 Hr. Composite	Annual

1. EFFLUENT SAMPLING AND ANALYSIS REQUIREMENTS-Continued

Parameter	Units	Type of Sample	Sample/Analysis Frequency
halomethanes	ug/L	Grab	Annual
heptachlor	ng/L	24 Hr. Composite	Annual
heptachlor epode	nag/L	24 Hr. Composite	Annual
hexachlorobenzene	ng/L	24 Hr. Composite	Annual
hexachlorocyclohexane			
alpha	ng/L	24 Hr. Composite	Annual
beta	ng/L	24 Hr. Composite	Annual
gamma	ng/L	24 Hr. Composite	Annual
PAHs	ng/L	24 Hr. Composite	Annual
PCBs	pg/L	24 Hr. Composite	Annual
pentachlorophenol	ug/L	24 Hr. Composite	Annual
TCDD equivalents	pg/L	24 Hr. Composite	Annual
toxaphene	pg/L	24 Hr. Composite	Annual
2,4,6-trichlorophenol	ug/l	24 Hr. Composite	Annual
acrylonitrile	ug/L	Grab	Annual
benzidine	ng/L	24 Hr. Composite	Annual
beryllium	ug/L	24 Hr. Composite	Annual
bis(2-chloroethyl)ether	ug/L	24 Hr. Composite	Annual
bis(2-ethylhexyl)-phthalate	ug/L	24 Hr. Composite	Annual
carbon tetrachloride	ug/L	Grab	Annual
3,3-dichlorobenzidine	ug/L	24 Hr. Composite	Annual
1,2-dichloroethane	ug/L	Grab	Annual
1, 1 -dichloroethylene	ug/L	Grab	Annual
1,3-dichloropropene	ug/L	Grab	Annual
2,4-dinitrotoluene	ug/L	Grab	Annual
1,2-diphenylhydrazine	ug/L	24 Hr. Composite	Annual
hexachlorobutadiene	ug/L	24 Hr. Composite	Annual
hexachloroethane	ug/L	24 Hr. Composite	Annual
isophorone	ug/L	24 Hr. Composite	Annual
N-nitrosodimethvlamine	ng/L	24 Hr. Composite	Annual
N-nitrosodiphenylamine	ug/L	24 Hr. Composite	Annual
1, 1,2,2-tetrachloro-ethane	ug/L	Grab	Annual
tetrachloroethylene	ug/L	Grab	Annual
1. 1,2-trichloroethane	ug/L	Grab	Annual
trichloroethvlene	ug/L	Grab	Annual
vinyl chloride	ug/L	Grab	Annual

D. BIOMONITORING

1. Static Acute Toxicity Monitoring

Static acute toxicity testing toxicity bioassay) of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted on a quarterly basis in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90-027, September, 1991 or subsequent editions), using the Fathead Minno (Pimephales promelas) at 20° C - 23° C for 96 hours. The test results shall be reported as percent survival of the test organisms or 96-hour LC-50. This biomonitoring requirement may be revised based on the results of the interim toxicity monitoring required in Biomonitoring Requirement No. 3 below.

2. Chronic Toxicity Monitoring

Chronic toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted on a quarterly basis in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Second Edition, EPA/600/4-89/001, March, 1989 or subsequent editions) and Supplement to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Revision 1, EPA/600/4-89/001a, September, 1989), using the most sensitive test organism and the most sensitive test deter-mined by the interim biomonitoring required in No. 3 below. Chronic toxicity testing of one hundred percent (100%) effluent shall also be conducted once annually using the two other test species. These selected test species shall be submitted for approval of the Executive Officer of the Regional Board prior to being used for conducting chronic toxicity testing. The chronic toxicity testing shall be conducted and reported in accordance with Items 3.b., c., d. and e., 4, and 5, outlined below.

3. Interim Toxicity Monitoring of Dechlorinated and pH Adjusted Effluent

a. Static Acute Toxicity Test

The discharger shall conduct 96-hour static acute toxicity tests monthly for a period of one year- (total number of tests = 12) using 24-hour composite samples of one hundred percent (100%), dechlorinated, and pH adjusted effluent. All tests shall be conducted in accordance with Methods for Measuring the Acute Toxicity Effluents to Freshwater and Marine Organisms (EPA 600/4-90-027, September, 1991 or subsequent editions) using the Fathead Minnow (Pimephales promelas) at 20°C - 23°C for 96 hours. The test results shall be reported as percent survival of the test organisms or 96-hour LC-50.

b. Chronic Toxicity Test

The discharger shall conduct chronic toxicity monitoring on a monthly basis for a period of one year using 24-hour composite samples of one hundred percent (100%). dechlorinated, and pH adjusted effluent. Effluent concentrations shall be 100%, 75%, 50%, 25%, 12.5%, and a control containing no effluent. Chronic toxicity testing shall be conducted in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and

Receiving Waters to Freshwater Organisms (Second Edition, EPA/600/4-89/001, March, 1989 or subsequent editions) and Supplement to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Revision 1, EPA/600/4-89/001a, September, 1989) These tests shall be initiated immediately upon the adoption of this order using at least 3 test species (one fish, one invertebrate, and one alga). The following tests shall be used unless an alternative is approved by the Executive Officer:

(1) 7-Day Fathead Minnow (Pimephales promelas) Larval Survival and Growth Test.
(2) 7-Day Ceriodaphnia Survival and Reproduction Test.
(3) 4-Day Selenastrum Growth Test.

c. In the event that recommended species is/are not available or the prescribed tests are not successful due to no fault of the discharger, other species/tests may be substituted with the prior approval of the Executive Officer of the Regional Board.

d. Results of the interim toxicity monitoring program shall be summarized in a final report and shall be submitted to the Executive Officer of the Regional Board within 60 days of completion of all the tests discussed in a. and b., above. The final report shall include the following:

(1) For the acute toxicity tests, the results shall be reported as 96-hour LC-10 or LC-50, whichever is appropriate.

(2) For the chronic toxicity tests, the no-observable effect concentrations (NOEC) shall be reported. Additionally, the effect of the effluent stream on the growth, reproduction, and survival rate of each test species shall be discussed.

(3) Any other statistically significant difference in response between the control and test organisms shall be reported.

(4) From the test results, the most sensitive test organism and the most sensitive test shall be determined and reported.

(5) Any other significant finding related to the biomonitoring program shall also be included in the final report.

4. A quality assurance/quality control program shall be instituted for independent verification of the results generated by the effluent toxicity monitoring program. Twice during the interim toxicity monitoring program, and once annually thereafter, the discharger shall split samples with an independent laboratory for conducting tests specified under Item l.a. and b., above. Prior approval of the Executive Officer shall be obtained for the selection of the independent laboratory. Results from the independent laboratory shall be submitted to the Regional Board and the discharger for evaluation.

5. After analyzing the data generated from the interim toxicity monitoring program, this monitoring and reporting program may be revised to include revised biomonitoring and

reporting programs. This may include a reduction or increase in the frequency of the sampling and testing.

6. If, in any acute toxicity test of 100% effluent, the effluent test result is statistically different from the control test result with a T-test, then the discharger will perform followup acute tests with a dillution series of effluent. The effluent concentrations will be 100%, 750/o, 50%, 25%, 12.5%. and a control containing no effluent. For chronic toxicity testing effluent concentrations shall be 100%, 75%, 50%, 25%, 12.5%, and a control containing no effluent. For both acute and chronic toxicity testing, a minimum of four replicates are required per concentration. The effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test must meet all test acceptability criteria specified in the acute and/or chronic toxicity testing manual. If the test acceptability criteria is not achieved, then the discharger shall re-test within 14 days. The test results must be reported according to the acute and/or toxicity testing manual chapter on report preparation, and shall be attached to the regular monitoring report. The discharger shall also submit the chronic toxicity data on a computer disk as specified in Suggested Standardized Reporting Requirements for Monitoring

   Chronic Toxicity SWRCB (February, 1993).

7. Toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for any of the tests.

E. RECEIVING WATER MONITORING

1. The following table constitutes the receiving water monitoring program. The monitoring outlined in the table is to be conducted at the following 6 monitoring stations, except for those constituents with a sample/analyses frequency of quarterly and annually, which shall be conducted only at Sample Stations a and e. The Executive Officer may reduce the monitoring frequency for those constituents required to be sampled/analyzed quarterly and semi-annually to annual sampling/analyses requirement, for those constituents found to be below acceptable detection limits (40 CFR 136) after four quarters of monitoring.

   a. San Diego River @ Carlton Hills Boulevard in Santee-Upstream Station

   b. Forrester Creek @ 50 feet upstream of the confluence with the San Diego River-Upstream -Station (The discharger may propose one upstream sampling station for approval by the Executive Officer, if one Can found, that determines the upstream concentrations of pollutants, including the contribution from Forrester Creek.)

   c. San Diego River @ 50 feet downstream of the confluence with Sycamore Creek

   d. San Diego River @ the pond just downstream of Old Mission Dam

e. San Diego River @ San Diego Mission ponds just south of Friars Road bridge

f. San Diego River @ Interstate Highway 5-beginning of the estuary

Note: The exact locations of these monitoring stations shall be coordinated with the Regional Board staff prior to initiating monitoring, and are subject to the approval of the Executive Officer.

1. RECEIVING WATER SAMPLING AND ANALYSIS REQUIREMENTS

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd/cfs		Biweekly*
specific conductance	umhos/cm	Grab	Biweekly*
pH	pH Units	Grab	Biweekly*
chlorine residual	ug/L	Grab	Biweekly*
turbidity	NTU	Grab	Biweekly*
Total/Fecal Coliform	MPN	Grab	Biweekly*
ammonia nitrogen	mg/L	Grab	Biweekly*
nitrate	mg/L	Grab	Biweekly*
total nitrogen	mg/L	Grab	Biweekly*
ortho phosphate phosphorous	mg/L	Grab	Biweekly*
total phosphate phosphorous	mg/L	Grab	Biweekly*
general plankton**		Grab	Biweekly*
transparency		Grab	Biweekly*
total dissolved solids	mg/L	Grab	Biweekly*
dissolved oxygen***	mg/L	Grab	Biweekly*
temperature	deg.	Grab	Biweekly*
total hardness	mg/L	Grab	Quarterly
total organic carbon	mg/L	Grab	Quarterly
fluoride	mg/L	Grab	Quarterly
boron	mg/L	Grab	Quarterly
sulfate	mg/L	Grab	Quarterly
chloride	mg/L	Grab	Quarterly
arsenic	ug/L	Grab	Quarterly
cadmium	ug/L	Grab	Quarterly
chromium (VI)	ug/L	Grab	Quarterly
chromium (III)	*ug/L*	Grab	Quarterly
cyanide	ug/L	Grab	Quarterly
copper	ug/L	Grab	Quarterly
DDT	ng/L	Grab	Quarterly
dieldrin	ng/L	Grab	Quarterly
endosulfan	ng/L	Grab	Quarterly
endrin	ng/L	Grab	Quarterly
heptachlor	ng/L	Grab	Quarterly

1. **RECEIVING WATER SAMPLING AND ANALYSIS REQUIREMENTS- Continued**

Parameter	Units	Type of Sample Frequency	Sample/Analysis
hexachlorocyclo-hexane-gamma	ng/L	Grab	Quarterly
lead	ug/L	Grab	Quarterly
mercury	ug/L	Grab	Quarterly
nickel	ug/L	Grab	Quarterly
PCBs	ng/L	Grab	Quarterly
pentachlorophenol	ug/L	Grab	Quarterly
selenium	ug/L	Grab	Quarterly
silver	ug/L	Grab	Quarterly
toxaphene	ng/L	Grab	Quarterly
tributyltin	ng/L	Grab	Quarterly
zinc	ug/L	Grab	Quarterly
1.2-dichlorobenzene	mg/L	Grab	Annual
1,3-dichlorobenzene	ug/L	Grab	Annual
endosulfan	ug/L	Grab	Annual
endrin	ug/L	Grab	Annual
fluoranthene	ug/L	Grab	Annual
mercury	ng/L	Grab	Annual
toluene	mg/L	Grab	Annual
acrolein	ug/L	Grab	Annual
antimony	mg/.L	Grab	Annual
bis(2-chloroiso-propyl)ether	mg/L	Grab	Annual
chlorobenzene	mg/L	Grab	Annual
dibutylphthalate	mg/L	Grab	Annual
diethylphthalate	mg/L	Grab	Annual
2,4-dimethylphenol	mg/L	Grab	Annual
dimethylphthalate	mg/L	Grab	Annual
4,6-dinitro-2-methylphenol	ug/L	Grab	Annual
2,4-dinitrophenol	mg/L	Grab	Annual
ethylbenzene	mg/L	Grab	Annual
hexachlorocyclo-pentadiene	mg/L	Grab	Annual
nitrobenzene	mg/L	Grab	Annual
thallium	ug/L	Grab	Annual
1, 1, 1 -trichloroethane	mg/L	Grab	Annual

1. **RECEIVING WATER SAMPLING AND ANALYSIS REQUIREMENTS- Continued**

Parameter	Units	Type of Sample	Sample/Analysis Frequency
aldrin	pg/L	Grab	Annual
benzene	ug/L	Grab	Annual
chlordane	pg/L	Grab	Annual
chloroform	ug/L	Grab	Annual
DDT	pg/L	Grab	Annual
1,4-dichlorobenzene	ug/L	Grab	Annual
dichloromethane	ug/L	Grab	Annual
dieldrin	pg/L	Grab	Annual
halomethanes	ug/L	Grab	Annual
heptachlor	ng/L	Grab	Annual
heptachlor epoxide	ng/L	Grab	Annual
hexachlorobenzene	ng/L	Grab	Annual
hexachlorocyclohexane			
alpha	ng/L	Grab	Annual
beta	ng/L	Grab	Annual
gamma	ng/L	Grab	Annual
PAHs	ng/L	Grab	Annual
PCBs	pg/L	Grab	Annual
pentachlorophenol	ug/L	Grab	Annual
TCDD equivalents	pg/L	Grab	Annual
toxaphene	pg/L	Grab	Annual
2,4,6-trichlorophenol	ug/l	Grab	Annual
acrylonitrile	ug/L	Grab	Annual
benzidine	ng/L	Grab	Annual
beryllium	ug/L	Grab	Annual
bis(2-chloroethyl)ether	ug/L	Grab	Annual
bis(2-ethylhexyl)-phthalate	ug/L	Grab	Annual
carbon tetrachloride	ug/L	Grab	Annual
3,3-dichlorobenzidine	ug/L	Grab	Annual
1,2-dichloroethane	ug/L	Grab	Annual
1, I -dichloroethylene	ug/L	Grab	Annual
1,3-dichloropropene	ug/L	Grab	Annual
2,4-dinitrotoluene	ug/L	Grab	Annual
1,2-diphenylhydrazine	ug/L	Grab	Annual
hexachlorobutadiene	ug/L	Grab	Annual
hexachloroethane	ug/L	Grab	Annual

1. RECEIVING WATER SAMPLING AND ANALYSIS REQUIREMENTS- Continued

Parameter	Units	Type of Sample	Sample/A-nalysis Frequency
isophorone	ug/L	Grab	Annual
N-nitrosodimethylamine	ng/L	Grab	Annual
N-nitrosodiphenylamine	ug/L	Grab	Annual
1, 1,2,2-tetrachloro-ethane	ug/L	Grab	Annual
tetrachloroethylene	ug/L	Grab	Annual
1, 1,2-trichloroethane	ug/L	Grab	Annual
trichloroethylene	ug/L	Grab	Annual
vinyl chloride	ug/L	Grab	Annual
acute toxicity****		Grab	Annual
chronic toxicity****		Grab	Annual
fish*****		Survey	Annual
benthic invertebrates*****		Survey	Annual

Note: Annual monitoring shall be conducted in October.

*Biweekly between April 1 and October 1, Monthly between October 2 and March 31

**General Plankton shall be collected with a 25 mesh plankton net and classified by genus to determine the relative concentration of each major group. Parameters to be assessed shall include: a) groups of planktonic taxa, b) frequency of phytoplankton and zooplankton, c) ratio of tolerant to intolerant taxa, and d) ratio of bluegreen algae to other taxa. Phytoplankton pigments shall be assessed by measurement of chlorophyll a, pheophyton a, and corrected chlorophyll a.

***Near surface D.O.s shall be collected within 2 hours of sunrise.

**** Acute and chronic toxicity testing shall be conducted according to the Biomonitoring Requirements above.

*****Benthic invertebrates and fish surveys shall be conducted in accordance with USEPA's guidance document entitled "Rapid Bioassessment Protocols" (May, 1989). Parameters to be assessed shall include: a) taxa, b) biotic index, ratio of scrapers to filtering species, c) ratio of EPT and chironomid, d) EPT index, e) taxa of fish, f) trophic levels, g) fish reproduction, h) fish recruitment, i) population size of each taxa, and j) ratio of intolerant to tolerant species.

F. SOLIDS MONITORING

1. The discharger shall maintain a permanent log of all the solids discharged to the San Diego metro system or hauled away from the treatment facility for use/disposal elsewhere and shall provide a monthly summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination.

2. The discharger shall monitor, on a daily basis, the volume (gallons per day) of sludge discharged to the San Diego metro system. The discharger shall also collect a daily grab sample of the sludge discharged to the San Diego metro system, and analyze this sample for total solids, total suspended solids, and biological oxygen demand. The results of this monitoring shall be submitted monthly.

G. WATER SUPPLY MONITORING

In August of each year, a sample of each source of the water supplied to the SWRP service area shall be obtained and analyzed for the following constituents:

Specific Conductance	Chloride
Total Dissolved Solids	Nitrate
Total Hardness	Fluoride
Boron	Magnesium
Sulfate	pH
Percent Sodium	

All of the above constituents shall be expressed in "mg/l" except specific conductance and pH, which shall be expressed in "micromhos/cm" and "pH units," respectively.

H. MONITORING REPORT SCHEDULE

Monitoring reports shall be submitted to the Executive Officer according to the dates in the following schedule:

Monitoring Frequency	Report Period	Report Due
Continuous, daily weekly, or monthly	January	By the 30th of the following month (February 28 for January)
	February, March..	
	April, May, June.	
	July, August, September, October, November, December	
Quarterly	January - March	April 30th
	April - June	July 30th
	July - September	October 30th
	October - December	January 30th
Semiannually	January - June	August 30th
	July - December	February 28th
Annually	January - December	February 28th

I. ANNUAL SUMMARY OF MONITORING DATA

By February 28th of each year the discharger shall submit an annual report to the Executive Officer. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements of this Order.

John H. Robertus
Executive Officer

Date: June 10, 1998

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO 1 TO ORDER NO. 98-60
NPDES NO. CA0107492
AN ADDENDUM MODIFYING THE MONITORING AND REPORTING PROGRAM
FOR
PADRE DAM MUNICIPAL WATER DISTRICT
PADRE DAM WATER RECYCLING FACILITY
DISCHARGE TO SYCAMORE CREEK AND THE SAN DIEGO RIVER
SAN DIEGO COUNTY

The California Regional Water Quality Board, San Diego Region (hereinafter Regional Board), finds that:

1. On May 9, 1998, the Regional Board adopted Order No. 98-60, *National Pollutant Discharge Elimination System Permit No. CA0107492, Waste Discharge Requirements for Padre Dam Municipal Water District, Padre Dam Water Recycling Facility Discharge to Sycamore Creek and The San Diego River, San Diego County.* Order No. 98-60 establishes requirements for the discharge of up to 2.0 million gallons per day (MGD) of treated sewage from the Padre Dam Water Recycling Facility (PDWRF) through the Santee Lakes to Sycamore Creek and the San Diego River.

2. On April 1, 1998, Padre Dam Municipal Water District (PDMWD) submitted a report of waste discharge requesting the Monitoring and Reporting Program of Order No. 98-60 be modified to change testing methods for measurement of biological activity and sampling benthic invertebrates, locations of sampling stations, and frequency of sampling for priority pollutants and biological oxygen demand.

3. The Monitoring and Reporting Program as modified by this Addendum is reasonable for determining compliance with the terms and conditions of Order No. 98-60 and all applicable State and federal water quality standards.

4. The issuance of this Addendum is exempt from the requirements for preparation of environmental document under the California Environmental Quality Act in accordance with Section 13389 of the Clean Water Code.

5. The Regional Board has considered all environmental factors associated with the existing discharge.

6. The Regional Board has notified PDMWD and all known interested parties of its intent to modify waste discharge requirements for the existing discharge.

a. The date, exact place, and time of sampling or measurements;
b. The individuals who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The laboratory and individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of all such analyses.

10. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Board or in this Order.

11. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices. Annually, the discharger shall submit to the Regional Board a written statement signed by a registered professional engineer certifying that all flow measurement devices have been calibrated and will reliably achieve the accuracy required by Monitoring Provision A.2.

12. All analytical data shall be reported uncensored with method detection limits (MDLs) and either practical quantitation levels (PQLs) or limits of quantitation (LOQs) identified. Acceptance of data should be based on demonstrated laboratory performance.

13. The discharger shall report all instances of noncompliance not reported under Reporting Requirement No. E.6 of Order No. 98-60 at the time monitoring reports arc submitted. The reports shall contain the information listed in Reporting Requirement No. E.6.

14. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement No. E. 15.

15. A composite sample is defined as a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory -immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the precious aliquot. Aliquots may be collected manually or automatically.

16. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.

17. Reports of monitoring surveys conducted to meet receiving water monitoring requirements of this monitoring and reporting program shall include, as a minimum, the following information:

a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, time of sampling, etc.)

b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediments, rocks, etc.)

c. A description of the sample collection and preservation procedures used in the survey.

d. A description of the specific method used for laboratory analysis.

e. An in-depth discussion of the results of the survey. The discussion shall compare data from the reference station(s) with data from the stations located in the area of the discharge. All tabulations and computations shall be explained.

18. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN/100 ml. The detection method used for each analysis shall be reported with the results of the analysis.

19. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method approved by the Regional Board.

20. The purpose of this monitoring program is to:
    a. Determine compliance with the terms and conditions of Order No. 98-60.
    b. Determine that the applicable State and federal water quality standards are met.

21. Revisions to this MRP may be made by the Regional Board at any time during the term Order No. 98-60, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.

22. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by January 30 of each year which summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. The discharger should have a success rate equal to or greater than 80 percent.

B. INFLUENT MONITORING

Influent monitoring is required to determine the effectiveness of a pretreatment program and assess treatment plant performance. The sampling station shall be located upstream of any in-plant return

flows and where a representative sample of the influent to the treatment plant can be obtained. The date and time of sampling shall be reported with the analytical values determined.

The following table shall constitute the influent monitoring program.

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous
specific conductance	umhos/cm	Grab	2 times/day
pH	pH Units	Grab	2 times/day
BOD(5-d,20-C)	mg/L	24 Hr. Composite	3 times/week
COD	mg/L	24 Hr. Composite	3 times/week
total suspended solids	mg/L	24 Hr. Composite	3 times/week
ammonia nitrogen	mg/L	Grab	Monthly
total nitrogen	mg/L	24 Hr. Composite	Monthly
total phosphorous	mg/L	24 Hr. Composite	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Quarterly
total hardness	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly
cyanide	ug/L	24 Hr. Composite	Quarterly
Metals*	ug/L	24 Hr. Composite	Quarterly
PAHs	ug/L	24 Hr. Composite	Annual
Pesticides*	ug/L	24 Hr. Composite	Annual
Base/Neutral Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Acid Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Volatile Organics*	ug/L	Grab	Annual

* See attachment A

C. EFFLUENT MONITORING

Effluent monitoring is required to determine compliance with the permit conditions and to identify operational problems and improve plant's performance. Effluent monitoring also provides information on wastewater characteristics and flows for use in interpreting water quality and biological data.

Sample stations are Station A - the point leaving the chlorine contact basin (after dechlorination) and Station B - the discharge point where water from Lake 1 overflows to Sycamore Creek. The date and time of sampling shall be reported with the analytical values determined.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the discharger shall monitor and record data for all of the parameters listed in the effluent monitoring schedule, after which the frequencies of analyses listed in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

In conformance with federal regulations (40 CFR 122.45(c)), analyses to determine compliance with the effluent concentration limitations for heavy metals shall be conducted using the total recoverable method. For these constituents, if the discharger satisfactorily demonstrates to the Regional Board an acid soluble/total recoverable method relationship, determination of compliance will be based on a comparison of the adjusted total recoverable method results to permit limits.

The following tables shall constitute the effluent monitoring program.

A. Samples of the discharge at Station A shall be analyzed for the following constituents:

Parameter	Units	Type of Sample	Sample/Analysis Frequency
specific conductance	umhos/cm	Recorder	Continuous
pH	pH Units	Recorder	Continuous
chlorine residual	ug/L	Recorder	Continuous
turbidity	NTU	Recorder	Continuous
BOD(5-d,20 deg. C)	mg/L	24-Hr. Composite	3 times/week
COD	mg/L	24-Hr. Composite	3 times/week
total suspended solids	mg/L	24-Hr. Composite	3 times/week
total/fecal Coliform	MPN/100ml	Grab	Daily
oil and grease	mg/L	24 Hr. Composite	Monthly
color	units	24 Hr. Composite	Monthly
MBAS	mg/L	24 Hr. Composite	Monthly
percent sodium	%	24 Hr. Composite	Monthly
total dissolved solids	mg/L	24 Hr. Composite	Monthly
total hardness	mg/L	24 Hr. Composite	Quarterly
total organic carbon	mg/L	24 Hr. Composite	Quarterly
boron	mg/L	24 Hr. Composite	Quarterly
chloride	mg/L	24 Hr. Composite	Quarterly
fluoride	mg/L	24 Hr. Composite	Quarterly
manganese	mg/L	24 Hr. Composite	Quarterly
sulfate	mg/L	24 Hr. Composite	Quarterly

Toxicity	See Section E below		Quarterly
cyanide	ug/L	24 Hr. Composite	Annual
PAHs	ug/L	24 Hr. Composite	Annual
Metals*	ug/l	24 Hr. Composite	Annual
Pesticides*	ug/L	24 Hr. Composite	Annual
Base/Neutral Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Acid Extractibles Organics*	ug/L	24 Hr. Composite	Annual
Volatile Organics*	ug/L	Grab	Annual
Fish in Lake 7 **	part per billion	Grab	Annual

*See attachment A

** Tissue of fish in Lake 7 shall be collected and analyzed according to the latest criteria of Toxic Substances Monitoring Program.

B. Samples of the discharge at Station B shall be analyzed for the following constituents:

Parameter	Units	Type of Sample	Sample/Analysis Frequency
ammonia nitrogen	mg/L	Grab	Monthly
total nitrogen	mg/L	24-Hr. Composite	Monthly
total phosphorous	mg/L	24 Hr. Composite	Monthly

C. Flow measurement

Parameter	Units	Type of Sample	Sample/Analysis Frequency
flowrate	mgd	Record/Totalizer	Continuous

D. RECEIVING WATER MONITORING

1. The following table constitutes the receiving water monitoring program. The monitoring outlined in the table is to be conducted at the following 6 monitoring stations, except for those constituents with a sample/analyses frequency of quarterly and annually, which shall be conducted only at Sample Stations a and e.

   a. San Diego River @ Carlton Hills Boulevard in Santee-Upstream Station.
   b. Forrester Creek @ 50 feet upstream of the confluence with the San Diego River-Upstream -Station.

c. San Diego River @ Mast Boulevard.
d. San Diego River @ the pond just downstream of Old Mission Dam.
e. San Diego River @ San Diego Mission ponds just south of Friars Road bridge.
f. San Diego River @ Fashion Valley Road.

The following table shall constitute the receiving water monitoring program

Parameter	Units	Type of Sample	Sample/Analysis Frequency	Sample Stations
flowrate	mgd		Biweekly*	a,b,c,d,e,f
specific conductance	umhos/cm	Grab	Biweekly*	a,b,c,d,e,f
pH	pH Units	Grab	Biweekly*	a,b,c,d,e,f
chlorine residual	ug/L	Grab	Biweekly*	a,b,c,d,e,f
turbidity	NTU	Grab	Biweekly*	a,b,c,d,e,f
Total/Fecal Coliform	MPN	Grab	Biweekly*	a,b,c,d,e,f
ammonia nitrogen	mg/L	Grab	Biweekly*	a,b,c,d,e,f
nitrate	mg/L	Grab	Biweekly*	a,b,c,d,e,f
total nitrogen	mg/L	Grab	Biweekly*	a,b,c,d,e,f
ortho phosphate phosphorous	mg/L	Grab	Biweekly*	a,b,c,d,e,f
total phosphate phosphorous	mg/L	Grab	Biweekly*	a,b,c,d,e,f
general plankton[1]		Grab	Biweekly*	a,b,c,d,e,f
transparency		Grab	Biweekly*	a,b,c,d,e,f
total dissolved solids	mg/L	Grab	Biweekly*	a,b,c,d,e,f
dissolved oxygen[2]	mg/L	Grab	Biweekly*	a,b,c,d,e,f
temperature	deg.	Grab	Biweekly*	a,b,c,d,e,f
total hardness	mg/L	Grab	Quarterly	a,e
total organic carbon	mg/L	Grab	Quarterly	a,e
fluoride	mg/L	Grab	Quarterly	a,e
boron	mg/L	Grab	Quarterly	a,e
sulfate	mg/L	Grab	Quarterly	a,e
chloride	mg/L	Grab	Quarterly	a,e
Metals[3]	mg/l	Grab	Quarterly	a,e
Toxicity	See Section E below		Quarterly	a,e
PAHs	ng/L	Grab	Annual	a,e
cyanide	ug/L	Grab	Annual	a,e
Pesticides[3]	ug/L	Grab	Annual	a,e
Base/Neutral Extractibles Organics[3]	ug/L	Grab	Annual	a,e
Acid Extractibles Organics[3]	ug/L	Grab	Annual	a,e

Volatile Organics[3]	ug/L	Grab	Annual	a,e
fish[5]	Survey		Annual	a,e
benthic invertebrates[6]	Survey		Annual	a,e

Note: Annual monitoring shall be conducted in October.
*Biweekly between April 1 and October 1, Monthly between October 2 and March 31
[1] General Plankton shall be analyzed by Lackey-Ball Plankton Technique (see attachment B), or an alternative method approved by Regional Board.
[2] Near surface D.O.s shall be collected within 2 hours of sunrise
[3] See attachment A
[5] Fish surveys shall be conducted in accordance with guidance document entitled "Rapid Bioassessment Protocols" (May, 1989). Parameters to be assessed shall include: a) taxa, b) biotic index, ratio of scrapers to filtering species, c) ratio of EPT and chironomid, d) EPT index, e) taxa of fish, f) trophic levels, g) fish reproduction, h) fish recruitment, i) population size of each taxa, and j) ratio of intolerant to tolerant species
[6] See Attachment C.

E. BIOMONITORING

1. Static Acute Toxicity Monitoring

Static acute toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90-027, September, 1991 or subsequent editions), using the Fathead Minno (Pimephales promelas) at 20° C - 23° C for 96 hours. The test results shall be reported as percent survival of the test organisms or 96-hour LC-50.

2. Chronic Toxicity Monitoring

Chronic toxicity testing of 24-hour composite samples of one hundred percent (100%) effluent, and a control containing no effluent, shall be conducted in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Second Edition, EPA/600/4-89/001, March, 1989 or subsequent editions) and Supplement to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Revision 1, EPA/600/4-89/001a, September, 1989), using the most sensitive test organism as determined by PDMWD in the past. Chronic toxicity testing of one hundred percent (100%) effluent shall also be conducted once annually using the two other test species.

c. In the event that recommended species is/are not available or the prescribed tests are not successful due to no fault of the discharger, other species/tests may be substituted with the prior approval of the Regional Board.

d. Results of the interim toxicity monitoring program shall be summarized in a final report and shall be submitted to the Regional Board within 60 days of completion of all the tests discussed in a. and b. above. The final report shall include the following:

(1) For the acute toxicity tests, the results shall be reported as 96-hour LC-10 or LC-50, whichever is appropriate.

(2) For the chronic toxicity tests, the no-observable effect concentrations (NOEC) shall be reported. Additionally, the effect of the effluent stream on the growth, reproduction, and survival rate of each test species shall be discussed.

4. A quality assurance/quality control program shall be instituted for independent verification of the results generated by the effluent toxicity monitoring program. Twice during the interim toxicity monitoring program, and once annually thereafter, the discharger shall split samples with an independent laboratory for conducting tests specified under Item l.a. and b., above. Prior approval of the Regional Board shall be obtained for the selection of the independent laboratory. Results from the independent laboratory shall be submitted to the Regional Board and the discharger for evaluation.

5. After analyzing the data generated from the interim toxicity monitoring program, this monitoring and reporting program may be revised to include revised biomonitoring and reporting programs. This may include a reduction or increase in the frequency of the sampling and testing.

6. If, in any acute toxicity test of 100% effluent, the effluent test result is statistically different from the control test result with a T-test, then the discharger will perform followup acute tests with a dillution series of effluent. The effluent concentrations will be 100%, 750/o, 50%, 25%, 12.5%. and a control containing no effluent. For chronic toxicity testing effluent concentrations shall be 100%, 75%, 50%, 25%, 12.5%, and a control containing no effluent. For both acute and chronic toxicity testing, a minimum of four replicates are required per concentration. The effluent tests must be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test must meet all test acceptability criteria specified in the acute and/or chronic toxicity testing manual. If the test acceptability criteria is not achieved, then the discharger shall re-test within 14 days. The test results must be reported according to the acute and/or toxicity testing manual chapter on report preparation, and shall be attached to the regular monitoring report. The discharger shall also submit the chronic toxicity data on a computer disk as specified in Suggested Standardized Reporting Requirements for Monitoring Chronic Toxicity SWRCB (February, 1993).

7. Toxic effects will be demonstrated if there is a statistically significant difference in response between the control and test organisms for any of the tests.

F. MONITORING REPORT SCHEDULE

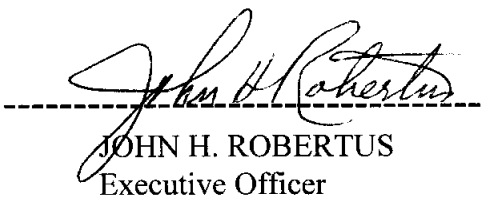
Monitoring reports shall be submitted to the Regional Board according to the dates in the following schedule:

Monitoring Frequency	Report Period	Report Due
Continuous, daily weekly, or monthly	January, February, March, April, May, June. July, August, September, October, November, December	By the 30th of the following month (February 28 for January)
Quarterly	January - March April - June July - September October - December	April 30th July 30th October 30th January 30th
Semiannually	January - June July - December	August 30th February 28th
Annually	January - December	February 28th

G. ANNUAL SUMMARY OF MONITORING DATA

By February 28th of each year the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements of this Order.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on April 14, 1999.



JOHN H. ROBERTUS
Executive Officer

ATTACHMENT NO. 1 TO ORDER NO. 98-60

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

STANDARD PROVISIONS

A. GENERAL PROVISIONS (Applicable to all permits)

1. *Duty to Comply* [40 CRF 122.41(a)] [CWC 133.81]

   a. The discharger must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

   b. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not been modified to incorporate the requirement.

2. *Duty to Reapply* [40 CFR 122.41(b)] [CWC 2235.4]

   a. If the discharger wishes to continue an activity regulated by this permit after the expiration date of this permit, the discharger must apply for and obtain a new permit. The discharger shall submit a new application at least 180 days before the permit expires.

   b. The terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with.

3. *Duty to Mitigate* [40 CFR 122.41(d)]

   The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this

permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. *Proper Operation and Maintenance* [40 CFR 122.41(e)]

The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a discharger only when necessary to achieve compliance with the conditions of this permit.

5. *Permit Actions* [40 CFR 122.41(f)] [CWC 1326(e)] [40 CFR 122.44(b)(1)]

a. This permit may be modified, revoked, and reissued, or terminated for cause. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

b. The RWQCB may also review and revise this permit at any time upon application of any affected person, or on the Regional Board's own motion.

c. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the discharger so notified.

6. *Property Rights* [40 CFR 122.41(g)] [CWC 13263(g)]

a. This permit does not convey any property rights of any sort, or any exclusive privileges.

b. All discharges of waste into waters of the state are privileges, not rights.

7. *Duty to Provide Information* [40 CFR 122.41(h)]

a. The discharger shall furnish the RWQCB, SWRCB, or U.S. EPA, within a reasonable time, any information which the RWQCB, SWRCB, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The discharger shall also furnish to the RWQCB, SWRCB, or U.S. EPA upon request, copies of records required to be kept by this permit.

8. *Inspection and Entry* [40 CFR 122.41(l)]

a. The discharger shall allow the Regional Board, State Board, U.S. EPA, or an authorized representative (including an authorized contractor acting as their representative) upon the presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, including sludge use and disposal activities, or where records must be kept under the conditions of this Order;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

(3) Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operation regulated or required under this Order; and

(4) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the Clean Water Act or California Water Code, any substances or parameters at any location.

9. *Bypass* [40 CFR 122.41(m)]

a. Definitions.

(1) "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operations. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

c. Notice

(1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, they shall submit prior notice, if possible, at least ten days before the date of the bypass.

(2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as described under **Provision D.11**.

d. Prohibition of Bypass

(1) Bypass is prohibited and the RWQCB may take enforcement action against the discharger for bypass, unless:

(2) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(3) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste or maintenance during normal periods of equipment downtime. This condition is not satisfied if the discharger could have

installed adequate backup equipment to prevent a bypass which occurs during normal periods of equipment downtime or preventive maintenance; and

(4) The discharger submitted notices as required under paragraph (c) of this section.

e. The Executive Officer may approve an anticipated bypass, after considering its adverse effect, it the Executive Officer determines that it will meet the three conditions listed above in paragraph (d) of this section.

10. *Upset* [40 CFR 122.41(n)]

a. Definitions

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions Necessary for a Demonstration of Upset

A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the discharger can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The discharger submitted notice of the upset as required in **Provision D.11**.

d. Burden of Proof

In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

11. *Transfers* [40 CFR 122.41(l)(3)] [CWC 13377] [40 CFR 122.61(a)(b)]

a. This permit is not transferable to any person except after notice to the RWQCB. The RWQCB may require modification or revocation and reissuance of the permit to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the California Water Code.

b. Except as provided in paragraph (c) below, a permit may be transferred by the discharger to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean Water Act.

c. As an alternative to transfers under paragraph (b) above, an NPDES permit may be automatically transferred to a new discharger if:

(1) The current discharger notifies the Regional Board at least 30 days in advance of the proposed transfer date in paragraph (c)(2) below;

(2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability; and

(3) The RWQCB does not notify the existing discharger and the proposed new discharger of its intent to modify or revoke and reissue the permit. A

modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (c)(2) above.

12. *Severability*

a. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

13. *Pollution, Contamination, Nuisance* [CWC 13050]

a. Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

B. REPORTING REQUIREMENTS (Applicable to all permits)

1. *Plant Supervision and Operation* [Title 23, CCR, Division 3, Chapter 14]

a. If the discharger's wastewater treatment plant is publicly owned or subject to regulation by the California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade.

2. *Signatory Requirements* [40 CFR 122.41(k)] [40 CFR 122.22]

a. All permit applications submitted to the RWQCB, SWRCB, and/or U.S. EPA shall be signed as follows:

(1) For a corporation: By a responsible corporate officer. For the purpose of this provision, a responsible corporate officer means: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980

dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively;

(3) For a municipality, state, federal or other public agency: By either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a Federal agency includes: The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA.).

b. All reports required by this Order and other information requested by the RWQCB, SWRCB, or U.S. EPA shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision;

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(3) The written authorization is submitted to the RWQCB, SWRCB, or U.S. EPA.

c. If an authorization under paragraph (b) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this provision must be submitted to the RWQCB, SWRCB or U.S. EPA prior to or together with any reports,

information, or applications to be signed by an authorized representative.

d. Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

3. *Compliance Schedules* [40 CFR 122.41(l)(5)]

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

4. *Twenty-hour Hour Reporting* [40 CFR 122.41(l)(6)]

a. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and it cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

b. The following shall be included as information that must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(2) Any upset with exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the RWQCB in this permit is to be reported within 24 hours. The RWQCB may waive the above required written report on a case-by-case basis for reports under this provision if an oral report has been received within 24 hours.

5. *Other Noncompliance* [40 CFR 122.41(l)(7)]

a. The discharger shall report all instances of noncompliance not reported under **Provisions B.3, B.4, and B.5** at the time monitoring reports are submitted. The reports shall contain the information listed in **Provision B.5**.

6. *Other Information* [40 CFR 122.41(l)(8)]

a. When the discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RWQCB, the discharger shall promptly submit such facts or information.

7. *Planned Changes* [40 CFR 122.41(l)(1)]

a. The discharger shall give notice to the RWQCB as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject **neither** to effluent limitations in the permit , not to notification requirements under 40 CFR Part 122.42 (a)(1); or

(3) The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

8. *Anticipated Noncompliance* [40 CFR 122.41 (l)(2)]

The discharger shall give advance notice to the RWQCB of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. ENFORCEMENT PROVISIONS (Applicable to All Permits)

1. The Clean Water Act provides that any person who violates a condition of this Order implementing Section 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a civil penalty not to exceed $25,000 per day of such violations. Any person who negligently violates conditions of this Order implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day for each violation, or by imprisonment for not more than one year, or both. Higher penalties may be imposed for knowing violations and for repeat offenders. The California Water Code provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the Clean Water Act. [40 CFR 122.41(a)(2)] [CWC Sections 13385 and 13387]

2. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both. [40 CFR 122.41(k)(2)]

3. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 ,

or by imprisonment for not more than 2 years, or both. Higher penalties may be imposed for repeat offenders. [40 CFR 122.41(j)(5)]

D. ADDITIONAL CONDITIONS APPLICABLE TO SPECIFIED CATEGORIES OF DISCHARGES

1. *Publicly-Owned Treatment Works (POTW)* [40 CFR 122.42(b)]

   a. All POTWs must provide adequate notice to the RWQCB of the following:

      (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

      (2) For purposes of this section, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

ATTACHMENT NO. 2 TO ORDER NO. 98-60

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

BASIN PLAN WASTE DISCHARGE PROHIBITIONS

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domicillary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in Section 13264 of the California Water Code is prohibited.

3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.

4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this Regional Board issues a NPDES permit authorizing such a discharge, the proposed discharge has been approved by the State Department of Health Services and the operating agency of the impacted reservoir, and the discharger has an approved fail-safe long-term disposal alternative.

5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board.

7. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of "storm water" is prohibited unless authorized by the Regional Board. [Under 40 CFR 122.26(b)(13), storm water is defined as runoff, snow melt runoff, and surface runoff and drainage. Under 40 CFR 122.26(b)(2), an illicit discharge is defined as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [40 CFR 122.26 amended at 56 FR 56553 November 5, 1991, 57 FR 11412, April 2, 1992.]

9. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in Section 13264 of the California Water Code, is prohibited.

11. The discharge of radioactive wastes amenable to alternative methods of disposal into waters of the State is prohibited.

12. The discharge of any radiological, chemical, and biological warfare agent, or high level radiological waste to waters of the State is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission

Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

ATTACHMENT NO. 1 TO ORDER NO. 98-60

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

STANDARD PROVISIONS

A. GENERAL PROVISIONS (Applicable to all permits)

1. *Duty to Comply* [40 CRF 122.41(a)] [CWC 133.81]

   a. The discharger must comply with all of the conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application.

   b. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not been modified to incorporate the requirement.

2. *Duty to Reapply* [40 CFR 122.41(b)] [CWC 2235.4]

   a. If the discharger wishes to continue an activity regulated by this permit after the expiration date of this permit, the discharger must apply for and obtain a new permit. The discharger shall submit a new application at least 180 days before the permit expires.

   b. The terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on continuation of expired permits are complied with.

3. *Duty to Mitigate* [40 CFR 122.41(d)]

   The discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this

permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. *Proper Operation and Maintenance* [40 CFR 122.41(e)]

The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the discharger to achieve compliance with this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a discharger only when necessary to achieve compliance with the conditions of this permit.

5. *Permit Actions* [40 CFR 122.41(f)] [CWC 1326(e)] [40 CFR 122.44(b)(1)]

a. This permit may be modified, revoked, and reissued, or terminated for cause. The filing of a request by the discharger for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

b. The RWQCB may also review and revise this permit at any time upon application of any affected person, or on the Regional Board's own motion.

c. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the discharger so notified.

6. *Property Rights* [40 CFR 122.41(g)] [CWC 13263(g)]

a. This permit does not convey any property rights of any sort, or any exclusive privileges.

b. All discharges of waste into waters of the state are privileges, not rights.

7. *Duty to Provide Information* [40 CFR 122.41(h)]

a. The discharger shall furnish the RWQCB, SWRCB, or U.S. EPA, within a reasonable time, any information which the RWQCB, SWRCB, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The discharger shall also furnish to the RWQCB, SWRCB, or U.S. EPA upon request, copies of records required to be kept by this permit.

8. *Inspection and Entry* [40 CFR 122.41(I)]

a. The discharger shall allow the Regional Board, State Board, U.S. EPA, or an authorized representative (including an authorized contractor acting as their representative) upon the presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, including sludge use and disposal activities, or where records must be kept under the conditions of this Order;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

(3) Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operation regulated or required under this Order; and

(4) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the Clean Water Act or California Water Code, any substances or parameters at any location.

9. *Bypass* [40 CFR 122.41(m)]

a. Definitions.

(1) "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. The discharger may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operations. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

c. Notice

(1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, they shall submit prior notice, if possible, at least ten days before the date of the bypass.

(2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as described under **Provision D.11**.

d. Prohibition of Bypass

(1) Bypass is prohibited and the RWQCB may take enforcement action against the discharger for bypass, unless:

(2) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(3) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste or maintenance during normal periods of equipment downtime. This condition is not satisfied if the discharger could have

installed adequate backup equipment to prevent a bypass which occurs during normal periods of equipment downtime or preventive maintenance; and

(4) The discharger submitted notices as required under paragraph (c) of this section.

e. The Executive Officer may approve an anticipated bypass, after considering its adverse effect, it the Executive Officer determines that it will meet the three conditions listed above in paragraph (d) of this section.

10. *Upset* [40 CFR 122.41(n)]

a. Definitions

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions Necessary for a Demonstration of Upset

A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the discharger can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The discharger submitted notice of the upset as required in **Provision D.11**.

d. Burden of Proof

In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

11. *Transfers* [40 CFR 122.41(l)(3)] [CWC 13377] [40 CFR 122.61(a)(b)]

a. This permit is not transferable to any person except after notice to the RWQCB. The RWQCB may require modification or revocation and reissuance of the permit to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act and the California Water Code.

b. Except as provided in paragraph (c) below, a permit may be transferred by the discharger to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean Water Act.

c. As an alternative to transfers under paragraph (b) above, an NPDES permit may be automatically transferred to a new discharger if:

(1) The current discharger notifies the Regional Board at least 30 days in advance of the proposed transfer date in paragraph (c)(2) below;

(2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability; and

(3) The RWQCB does not notify the existing discharger and the proposed new discharger of its intent to modify or revoke and reissue the permit. A

modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (c)(2) above.

12. *Severability*

a. The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order shall not be affected thereby.

13. *Pollution, Contamination, Nuisance* [CWC 13050]

a. Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

B. REPORTING REQUIREMENTS (Applicable to all permits)

1. *Plant Supervision and Operation* [Title 23, CCR, Division 3, Chapter 14]

a. If the discharger's wastewater treatment plant is publicly owned or subject to regulation by the California Public Utilities Commission, it shall be supervised and operated by persons possessing certificates of appropriate grade.

2. *Signatory Requirements* [40 CFR 122.41(k)] [40 CFR 122.22]

a. All permit applications submitted to the RWQCB, SWRCB, and/or U.S. EPA shall be signed as follows:

(1) For a corporation: By a responsible corporate officer. For the purpose of this provision, a responsible corporate officer means: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980

dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively;

(3) For a municipality, state, federal or other public agency: By either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a Federal agency includes: The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA.).

b. All reports required by this Order and other information requested by the RWQCB, SWRCB, or U.S. EPA shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this provision;

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(3) The written authorization is submitted to the RWQCB, SWRCB, or U.S. EPA.

c. If an authorization under paragraph (b) of this provision is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this provision must be submitted to the RWQCB, SWRCB or U.S. EPA prior to or together with any reports,

information, or applications to be signed by an authorized representative.

d. Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

3. *Compliance Schedules* [40 CFR 122.41(l)(5)]

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

4. *Twenty-hour Hour Reporting* [40 CFR 122.41(l)(6)]

a. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and it cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

b. The following shall be included as information that must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(2) Any upset with exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the RWQCB in this permit is to be reported within 24 hours. The RWQCB may waive the above required written report on a case-by-case basis for reports under this provision if an oral report has been received within 24 hours.

5. *Other Noncompliance* [40 CFR 122.41(l)(7)]

a. The discharger shall report all instances of noncompliance not reported under **Provisions B.3, B.4, and B.5** at the time monitoring reports are submitted. The reports shall contain the information listed in **Provision B.5**.

6. *Other Information* [40 CFR 122.41(l)(8)]

a. When the discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RWQCB, the discharger shall promptly submit such facts or information.

7. *Planned Changes* [40 CFR 122.41(l)(1)]

a. The discharger shall give notice to the RWQCB as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject **neither** to effluent limitations in the permit , not to notification requirements under 40 CFR Part 122.42 (a)(1); or

(3) The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

8. *Anticipated Noncompliance* [40 CFR 122.41 (l)(2)]

The discharger shall give advance notice to the RWQCB of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. ENFORCEMENT PROVISIONS (Applicable to All Permits)

1. The Clean Water Act provides that any person who violates a condition of this Order implementing Section 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a civil penalty not to exceed $25,000 per day of such violations. Any person who negligently violates conditions of this Order implementing Section 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day for each violation, or by imprisonment for not more than one year, or both. Higher penalties may be imposed for knowing violations and for repeat offenders. The California Water Code provides for civil and criminal penalties comparable to, and in some cases greater than, those provided under the Clean Water Act. [40 CFR 122.41(a)(2)] [CWC Sections 13385 and 13387]

2. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both. [40 CFR 122.41(k)(2)]

3. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 ,

or by imprisonment for not more than 2 years, or both. Higher penalties may be imposed for repeat offenders. [40 CFR 122.41(j)(5)]

D. ADDITIONAL CONDITIONS APPLICABLE TO SPECIFIED CATEGORIES OF DISCHARGES

1. *Publicly-Owned Treatment Works (POTW)* [40 CFR 122.42(b)]

   a. All POTWs must provide adequate notice to the RWQCB of the following:

      (1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

      (2) For purposes of this section, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

NPDES

ATTACHMENT NO. 2 TO ORDER NO. 98-60

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

BASIN PLAN WASTE DISCHARGE PROHIBITIONS

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domicillary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in Section 13264 of the California Water Code is prohibited.

3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.

4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this Regional Board issues a NPDES permit authorizing such a discharge, the proposed discharge has been approved by the State Department of Health Services and the operating agency of the impacted reservoir, and the discharger has an approved fail-safe long-term disposal alternative.

5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board.

7. The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of "storm water" is prohibited unless authorized by the Regional Board. [Under 40 CFR 122.26(b)(13), storm water is defined as runoff, snow melt runoff, and surface runoff and drainage. Under 40 CFR 122.26(b)(2), an illicit discharge is defined as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [40 CFR 122.26 amended at 56 FR 56553 November 5, 1991, 57 FR 11412, April 2, 1992.]

9. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in Section 13264 of the California Water Code, is prohibited.

11. The discharge of radioactive wastes amenable to alternative methods of disposal into waters of the State is prohibited.

12. The discharge of any radiological, chemical, and biological warfare agent, or high level radiological waste to waters of the State is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission

Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.